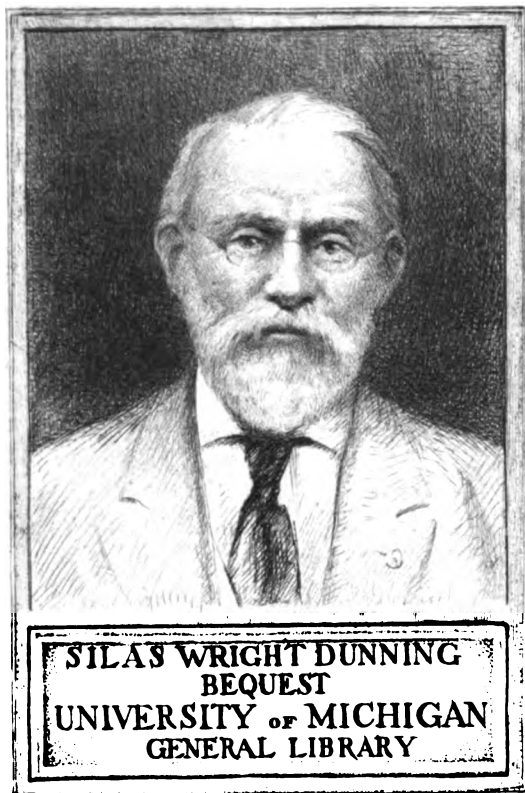

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January 1923

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Journal

OF THE

United Service Institution of India.

Published under the Authority of the Council.



SIMLA :

UNITED SERVICE INSTITUTION OF INDIA.

Published Quarterly.

—o—o—

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United Service Institution of India.

RULES OF MEMBERSHIP.

ALL officers of the Royal Navy, Army, Royal Air Force, Colonial Forces, and of the Indian Defence Force, and Gazetted Government Officers shall be entitled to become members without ballot, on payment of the entrance fee and annual subscription.

The Council shall have the power of admitting as honorary members the members of the Diplomatic Corps, foreign, naval and military officers, foreigners of distinction, other eminent individuals, and benefactors to the Institution, not otherwise eligible to become members.

Life Members of the Institution shall be admitted on the following terms:—

Rupees 75 + entrance fee (Rs. 10) = Rs. 85.

Ordinary members of the Institution shall be admitted on payment of an entrance fee of Rs. 10 on joining, and an annual subscription of Rs. 10, to be paid in advance. The period of subscription commences on 1st January.

Subscribing members of the Royal United Service Institution, Whitehall, London, are not liable for entrance fee while the affiliation rules are in force.

Life members receive the Journal of the Institution post free anywhere, but ordinary members only in India. All members may obtain books from the library on paying V. P. postage.

Honorary Members shall be entitled to attend the lectures and debates, and to use the premises and library of the Institution without payment; but should they desire to be supplied with the Journal, an annual payment of Rs. 10, in advance, will be required.

Divisional, Brigade and Officers' Libraries, Regimental Messes, Clubs, and other subscribers for the Journal, shall pay Rs. 10 per annum.

Serjeants' Messes and Regimental Libraries, Reading and Recreation Rooms shall be permitted to obtain the Journal on payment of an annual subscription of Rs. 8.

If a member fails to pay his subscription for any financial year (ending 31st December) before the 1st June in the following year, a registered notice shall be sent to him by the Secretary inviting his attention to the fact. If the subscription is not paid by 1st January following his name shall be posted in the Reading Room for six months and then struck off the roll of members.

Members joining the Institution on or after the 1st October, will not be charged subscription on the following 1st January, unless the Journals for the current year have been supplied.

Members are responsible that they keep the Secretary carefully posted in regard to changes of rank and address. Duplicate copies of the Journal will not be supplied free to members when the original has been posted to a member's last known address, and no book is returned by the post.

Members or Subscribers to the Journal, intimating a wish to have their Journal posted to any address out of India, shall pay in advance Rupee 1 per annum, to cover foreign postage charges, but Life Members who have left India shall not be liable for foreign postage on Journals.

All communications shall be addressed to the Secretary, United Service Institution of India, Simla.

Contributions to the Journal.

All papers must be written in a clear, legible hand, and only on one side of the paper. All proper names, countries, towns, rivers, etc., must, when in manuscript, be written in capital letters. All plans must have a scale on them.

Contributors are responsible, when they send articles containing any information which they have obtained by virtue of their official positions, that they have complied with the provisions of A. R. I., Vol. II., para. 487, and King's Regulations, para. 453.

Anonymous contributions under a *nom-de-guerre* will not be accepted or acknowledged; all contributions must be sent to the Secretary under the name of the writer and the paper will, if accepted, be published under that name unless a wish is expressed for it to be published under a *nom-de-guerre*. The Executive Committee will decide whether the wish can be complied with.

The Committee reserve to themselves the right of omitting any matter which they consider objectionable. Articles are only accepted on these conditions.

The Committee do not undertake to authorise the publication of such papers as are accepted, in the order in which they may have been received.

Contributors will be supplied with three copies of their paper *gratis*, if published.

Manuscripts of original papers sent for publication in the Journal will not be returned to the contributor, unless he expresses a wish to have them back and pays the postage.

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Military Widows' Fund, British Service.

JOURNAL FOR OCTOBER 1922.

The Secretary will be glad to receive from Members any spare copies of the United Service Institution Journal for October 1922. Postage will be paid on any copies returned.

Benefits are payable whether the deceased officer's family is residing in India or not.

It is to the advantage of an officer to join the Fund on his first tour of service in India, as otherwise, on joining it in a subsequent tour he would have to pay subscriptions for any previous tours in the country as a married officer.

The Fund (late Queen's Military Widows' Fund) was established in 1820, to assist families of British Service (Army) officers dying in India, and mainly to enable them to return home without delay.

The Fund is controlled by a Committee consisting of and elected by subscribing officers serving at Army Head Quarters, Simla.

For admission and rules apply to:—

The Secretary,
MILITARY WIDOWS' FUND,
Army Head Quarters,
Simla.

United Service Institution of India.

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 His Excellency the Governor of the U. P. of Agra and Oudh.
 His Excellency the Governor of the Punjab.
 His Excellency the Governor of Burma.
 His Excellency the Governor of Bihar and Orissa
 His Excellency the Naval Commander-in-Chief, East Indies.
 The General Officer Commanding-in-Chief, Northern Command.
 The General Officer Commanding-in-Chief, Southern Command.
 The General Officer Commanding-in-Chief, Eastern Command
 The General Officer Commanding-in-Chief, Western Command.

MEMBERS OF THE COUNCIL, 1922-23.

Ex-officio Members.

- | | |
|---|--|
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2. The Secretary, Army Department.
3. The Hon'ble Mr. Denys Bray, C.I.E., C.B.E.
4. The Adjutant General in India. | 5. The Quartermaster General in India.
6. The Director, Medical Services.
7. Col. Sir S. Crookshank, K.C.M.G., C.B., C.I.E., D.S.O., M.V.O.
8. The Director, Military Operations—General Staff. |
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Elected Members.

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3. Mr. G. R. Clarke. C.S.I., O.B.E.
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*12. Capt. J. G. Smyth, V.C., M.C. |
|--|---|

* Members of the Executive Committee and in addition.

E. HAWARD, Esq.

SECRETARY & EDITOR

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... **MISS E. K. SUSENS.**

... **ALLIANCE BANK OF SIMLA, LTD.**

1. The United Service Institution of India is situated at Simla.
2. Officers wishing to become members of the United Service Institution of India should apply to the Secretary. The rules of membership are printed on the opposite page.
3. The reading-room of the Institution is provided with all the leading newspapers, magazines, and journals of military interest that are published.
4. There is a well-stocked library in the Institution, from which members can obtain books on loan, free. Suggestions for new books are solicited, and will be submitted to the Committee. Books are sent out to members V. P. for the postage.
5. The Institution publishes a Quarterly Journal in the months of January, April, July and October which is issued postage free to members in India and to all life members; but ordinary members wishing to have their journals sent to any address out of India must pay in advance Re. 1 per annum to cover foreign postage charges.
6. Members and the public are invited to contribute articles to the Journal of the Institution for which honoraria will be awarded by the Executive Committee. Rules for the guidance of contributors will be found on the opposite page.
7. **Members are responsible that they keep the Secretary carefully posted with regard to changes of address.**
8. When on leave in England, members can, under the affiliation rules in force, attend the lectures and make use of the reading-room, etc., of the Royal United Service Institution, Whitehall, on payment of a subscription of 5 shillings per six months.

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Cold at the	Cramp,
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United Service Institution of India.

JANUARY 1923.

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SECRETARY'S NOTES.**I.—New Members.**

The following new members joined the Institution from the 16th September 1922 to the 15th December 1922.

Life Members,

Capt. T. R. Lee.

Lieut. S. W. Joslin.

Ordinary Members.

Lieut.-Col. J. D. Crawford.

Major G. V. Heriz-Smith.

Lt.-Col. R. P. Crawley.

Capt. C. J. E. Greenwood.

Col. J. Whitehead.

Capt. W. Swinton.

Col. A. J. G. Moir.

Capt. H. V. Henrotin.

Capt. W. R. C. Penney.

Capt. T. O. M. Buchan.

Major W. R. Meredith.

II.—Examinations.

Books on Military History and Languages with Dictionaries are available in the Library and the following list of books, which is complete in accordance with the War Office list, may be found useful for reference by officers, studying for promotion examinations or entrance to the Staff College.

Secretary's Notes.

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MILITARY HISTORY. (SPECIAL PERIOD).

1. *The Campaign of the British Army in France and Belgium up to 20th November 1914.*

A.—OFFICIAL ACCOUNT.

Sir John French's Despatches.

B.—OTHER BOOKS.

40 days in 1914 by General Maurice (new edition).

The Battle of the Marne, by G. H. Perris.

1914, by Viscount French.

General sketch of the European War, by Belloc.

The Great War, by Colonel Sedgwick

My memoirs, by Ludendorf.

Falkenhayn's book.

Von Kluck's book.

British Campaign in France, Flanders, by Conan Doyle, 1914.

Nelson's History of the War.

Ypres, by German General Staff.

Oxford pamphlets. August 1914. The Coming of the War,
by S. Williamson.

Oxford pamphlets. August 1914. No. VII and X.

Times Documentary History of the War, Vol. V. Military.
Part I.

Times Documentary History of the War, Vol. VIII Part III.

Der Grobe Krieg Schlacht bei Mons.

Der Grobe Krieg Schlacht bei Longwy.

2. *The Palestine Campaign.*

A.—OFFICIAL ACCOUNT.

A brief record of the advance of the Egyptian Expeditionary
Force 1919.

B.—OTHER BOOKS.

Allenby's final triumph, by W. T. Massey.

How Jerusalem was won, by W. T. Massey.

3. *Organization of Army since 1868.*

A.—ORGANIZATION OF ARMY SINCE 1868.

History of British Army, by Fortescue.

Outline of Development of British Army, by Genl. Anderson.

Our Fighting Services,.....by Sir Evelyn Wood.

Secretary's Notes.

B.—FORCES OF THE EMPIRE.

The Statesman's Year Book.

Army List.

Articles in Newspapers and Magazines *viz.*, R. U. S. I.

Army Quarterly, journal of the U. S. I. of India, etc.

4. *Development and Constitution of the British Empire.*

A.—THE BRITISH EMPIRE.

Encyclopedia Britannica—(Contains much concentrated information).

The Statesman's Year Book.

Whitaker's Almanack.

The Colonial Office List.

The British Empire and its History, by E. G. Hawke.

The Government of British Empire, by Jenks 1918.

The British Empire (6 lectures) by Sir C. P. Lucas 1918.

The foundation and growth of the British Empire, by J. A. Williamson 1918.

The beginnings of English Overseas Enterprise, by Sir C. P. Lucas 1917.

The Government of England, by L. A. Lowell 1912.

The Expansion of the British Empire, by W. H. Woodward 1900.

Overseas Britain, by E. F. Knight 1907.

The origin and growth of the English Colonies and of their system of Government, by H. E. Egerton 1903.

A short History of Politics, by Jenks 1900.

The English Constitution, by Bagehot 1909.

The Expansion of England, by Sir J. Seely 1883.

Introduction of the study of the law of the Constitution, by A. V. Dicey 1908.

England in the Seven Years' War, Sir J. Corbett 1907.

Selected Speeches and Documents on British Colonial Policy—
2 Vols. A. B. Keith, 1918.

B.—BOOKS ON SPECIAL PORTIONS OF THE EMPIRE OR WORLD.

The rise and expansion of British Dominions in India, by Sir A. C. Lyall 1894.

A brief history of the Indian Peoples, by Sir W. H. Hunter 1907.

The Nearer East, by Hogarth 1902.

retary's Notes.

Modern Egypt, by Cromer 1908.
The History of Canada, by W. L. Grant.
Nova Scotia, by B. Wilson 1911.
Report on British North America, by Sir C. P. Lucas.
The Union of South Africa, by R. H. Brand 1909.
Short History of Australia, by E. Scott.
History of the Australasian Colonies, by Jenks 1912.
The English in the West Indies, by J. A. Froude 1888.
The Lost Possessions of England, by W. F. Lord 1896.

5. Military Geography.

Naval and Military Geography of the British Empire, by Dr. Vaughan Cornish 1916.
Outlines of Military Geography, by Col. A. C. Macdonnel 1911.
Introduction of Military Geography, by Col. E. S. May.
Imperial Defence.....by Col. E. S. May.
Britain and the British Seas by H. J. Makinder 1907.
Military Geography, by Macguire.
Imperial Strategy, by Repington.
War and the Empire, by H. Foster.
Historical Geogrpby of British Colonies (Dominions) 7 Vols.
by Sir C. P. Lucas 1906-17.
Vol. 1 Mediterranean.
Vol. 2 West Indies.
Vol. 3 West Africa.
Vol. 4 South Africa.
Vol. 5 Canada.
Vol. 6 Australia.
Vol. 7 India.

The Influence of Sea Power on History, by A. I. Mahan 1890.
Historical Geography of the British Empire by Hereford George.

The Mastery of the Pacific, by A. R. Colquhoun 1902.
Frontiersby C. B. Fawcett 1918.

III.—Payment for Articles in the Journals.

Articles accepted for publication in the Journal are paid for, and a sum of approximately Rs. 400 is awarded for articles and reviews published in each Quarterly Journal.

IV.—Contributions to the Journal.

With reference to Army Regulations, India, Volume II, paragraph 487, and King's Regulations, paragraph 453, as amended by Army Order 340 of 1913, intending contributors to the Journal of the United Service Institution of India are informed, that action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Committee. Contributors are, therefore, responsible that the sanction of their immediate superior has been obtained, and this should be noted on all articles sent for publication. Articles need not be submitted in duplicate.

Contributors must have their articles either typed or printed.

2. It has been decided to introduce two new items in the Journal headed—

- i. Criticisms.
- ii. Notes on current Military and Naval questions.

The rules for (i) to be—

That the criticism should be headed with the title of the article criticised, and the date of the Journal in which published.

That criticisms should be signed with a nom-de-plume, but that critics must disclose their identity to the Secretary.

The rules for (ii) to be the same as for Articles.

Instructions for the Preparation of Drawings and Plans for Reproduction by Lithography.

These should be in *jet* black. No washes nor ribands of colour should on any account be used.

If it is absolutely necessary to use colour (and these are only permissible in line work or names) the following will reproduce photographically, i.e. :—

Dark red, dark orange, dark green. No other colour should on any account be used.

V.—Library Rules.

1. The Library is only open to members and honorary members of the United Service Institution of India, members are requested to look upon books as not transferable to their friends.

2. No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

3. The United Service Institution of India is open all the year round—including Sundays—from 9 a. m. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

4. A member shall not be allowed, at one time, more than three books or sets of books.

5. Papers, magazines, "Works of reference" or books marked "Not to be taken away", or noted as "Confidential" may not be removed.

6. No particular limit is set as to the number of days for which a member in Simla may keep a book, the Council being desirous of making the library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member it will be recalled.

7. Applications for books from members at outstations are dealt with as early as possible, and books are despatched per Registered V. P. P. They must be returned carefully packed per Registered parcel post within one month of date of issue, or application made for permission to retain them for a further period. This will always be granted unless the book is required by another member.

8. If a book is not returned at the end of four months, it must be paid for, without the option of return, if so required by the Executive Committee.

9. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

10. The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

11. A list of all books presented and purchased and also a list of books useful to members studying for the Staff College and promotion Examinations will be found, under Secretary's Notes, in the quarterly issue of the U. S. I. Journal. Members are invited to note any books which they think might with advantage be procured for the Institution. The suggestions will be placed before the Secretary.

12. Members are invited to contribute presents of books, maps, and photographs of naval and military interest. These may be addressed to the Secretary U. S. I. of India, Simla. They will be duly acknowledged.

VI.—Library Catalogue.

Under Revision.

VII.—Gold Medal Prize Essay.**GOLD MEDAL PRIZE ESSAY COMPETITION 1922-23.**

The Council have chosen as the subject for the Gold Medal Essay for 1922-23 the following :—

"TO WHAT EXTENT WOULD THE USE OF LATEST SCIENTIFIC AND MECHANICAL METHODS OF WARFARE AFFECT OPERATIONS ON THE NORTH WEST FRONTIER OF INDIA."

The following are the conditions of the competition :—

- (1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, and Royal Air Force or Indian Defence Force who are members of the U. S. I. of India.
- (2) Essays must be printed or type-written and submitted in triplicate.
- (3) When a reference is made to any work, the title of such work is to be quoted.
- (4) Essays are to be *strictly anonymous*. Each must have a motto, and enclosed with the essay, there should be sent a *sealed* envelope with the motto written on the outside and the name of the competitor inside.
- (5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1923.
- (6) Essays will be submitted for adjudication to 3 Judges chosen by the Council. When the decisions of the 3 Judges are received the Committee will submit the four essays, placed first in order by the Judges, with their recommendations on the award of the Gold Medal to the Council, who will decide whether the Medal is to be awarded and whether the essay may be published.
- (7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1923.
- (8) All essays submitted are to become the property of the United Service Institution of India, *absolutely* and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.
- (9) Essays should not exceed about 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.

By order of the Council,

SIMLA, }
30th August 1922. }

F. A. FINNIS, LIEUT.-COL.
Secretary, U. S. I. of India.

Secretary's Notes

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VIII.—Army List Pages.

The U. S. I. is prepared to supply members and units with manuscript or typewritten copies of Indian Army List pages, at the following rates:—

Manuscript, per page Re. 1.

Typewritten, per page Rs. 2.

IX.—Books.

Books Purchased.

Title.	Author.	Published.
1. The Royal Regiment of Artillery at Le Cateau	Becke	1919
2. The Desert Mounted Corps 1917-18	Preston	1919
3. What is Germany doing?	Surrey-Dane	1922
4. The Crumbling of an Empire 1-9-1919.—1-3-1922	British Association	1922
5. Hugo's French Simplified	Hugo	
6. The Development of Indian Policy	G. Anderson & M. Sabedar	1921
7. The Expansion of British India	ditto	1918
8. Marlborough & the Rise of British Army.	C. T. Atkinson	1921
9. The Dream of Bolshevism	Candler	1920
10. The Dover Patrol	"Jackstaff."	1920
11. British History in the 19th Century	Trevelyan	1922
12. My Reminiscences of East Africa	Von Lettow-Vorbeck	1920
13. Promotion Examination Paper April 1922 and Oct. 1922	Published by H. M. S. O. London	1922
14. Comparative History 1878-1914.	The Ex-Emperor of Germany	1922
15. Statistics of the Great War (Military Effort of the British Empire 1914-20)	"Official" War Office, London, published by H. M. S. O.,	

Secretary's Notes.

Books Ordered.			
<i>Title.</i>	<i>Author.</i>	<i>Published.</i>	
1. History of the Great War, 1914-18 Principal events ...	"Official" War Office London	1922	
2. Outlines of Modern European History ...	Roberts ...	...
3. An Account of my life H. H. Nawab	Sultana Jahan Begum	...	
4. With the Thackeray's in India ...	W. Hunter	...	
5. The Economic Policy, of the Company ...	G. Anderson and M. Subedar,	(Now being printed.)	
6. Pomp of Power ...	"Anonymous"	...	
7. Instruction in Mesopotamia. in 1920 ...	Haldane...	...	

X.—Appreciation.

"Prints of British, Military, Operation" by Lt.-Col. C. de W. Crookshank (His Majesty's Body Guard).

The Author has very kindly presented to the Institution a copy of this catalogue raisonne of British military prints, which has been placed in the Reading Room.

XI.—

The Institution has for disposal a number of old copies of Staff College Examination papers with maps enclosed, 1906 and upwards, at annas 4 per copy.

United Service Institution of India.

PRIZE ESSAY GOLD MEDALISTS.

(With rank of Officers at the date of the Essay).

- 1872...ROBERTS, Lieut.-Col. F. S., V.C., C.B., R.A.
1873...COLQUHOUN, Capt. J. S., R.A.
1874...COLQUHOUN, Capt. J. S., R.A.
1879...ST. JOHN, Maj. O. B. C., R.E.
1880...BARROW, Lieut. E. G., 7th Bengal Infantry.
1882...MASON, Lieut. A. H., R.E.
1883...COLLEY, Maj. E. H. H., S.C.
1884...BARROW, Capt. E. G., 7th Bengal Infantry.
1887...YATE, Lieut. A. C., 27th Baluch Infantry.
1888...MAUDE, Capt. F. N., R.E.
 YOUNG, Maj. G. F., 24th Punjab Infantry (specially awarded a silver medal).
1889...DUFF, Capt. B., 9th Bengal Infantry.
1890...MAGUIRE, Capt. C. M., 2nd Cav., Hyderabad Contingent.
1891...CARDEW, Lieut. F. G., 10th Bengal Lancers.
1893...BULLOCK, Maj. G. M., Devonshire Regiment.
1894...CARTER, Capt. F. C., Northumberland Fusiliers.
1895...NEVILLE, Lieut.-Col. J. P. C., 14th Bengal Lancers.
1896...BINGLEY, Capt. A. H., 7th Bengal Infantry.
1897...NAPIER, Capt. G. S. F., Oxfordshire Light Infantry.
1898...MULLALLY, Maj. H., R.E.
 CLAY, Capt. C. H., 43rd Gurkha Rifles (specially awarded a silver medal)
1899...NEVILLE, Col. J. P. C., S.C.
1900...THUILLIER, Capt. H. F., R.E.
 LUBBOCK, Capt. G., R.E. (specially awarded a silver medal).
1901...RANKEN, Lieut.-Col. G. P. P., 46th Punjab Infantry.
1902...TURNER, Capt. H. H. F., 2nd Bengal Lancers.
1903...HAMILTON, Maj. W. G., D.S.O., Norfolk Regiment.
 BOND, Capt. R. F. G., R.E. (specially awarded a silver medal).
1904...MACMUNN, Maj. G. F., D.S.O., R.F.A.
1905...COCKERILL, Maj. G. K., Royal Warwickshire Regiment.
1907...WOOD, Maj. E. J. M., 99th Deccan Infantry.
1908...JEUDWINE, Maj. H. S., R.A.
1909...MOLYNEUX, Maj. E. M. J., D.S.O., 12th Cavalry.
 ELSMIE, Maj. A. M.S., 56th Rifles, F.F., (specially awarded a silver medal)
1911...MR. D. PETRIE, M. A., Punjab Police
1912...CARTER, Maj. B. C., The King's Regiment.
1913...THOMSON, Maj. A. G., 58th Vaughan's Rifles (F.F.).
1914...BAINBRIDGE, Lieut.-Col. W. F., D.S.O., 51st Sikhs, (F.F.)
 NORMAN, Maj. C. L., M.V.O., Q. V. O., Corps of Guides (specially awarded a silver medal).
1915...No award.
1916...CRUM, Maj. W. E., V. D., Calcutta Light Horse.
1917...BLAKER, Maj. W. F., R. F. A.
1918...GOMPERTZ, Capt. A. V., M. C., R. E.
1919...GOMPERTZ, Capt. M. L. A., 108th Infantry.
1920...KEEN, Lt.-Col. F. S., D.S.O., 2/15 Sikhs.
1921...No Award.
1922...MARTIN, Maj. H. G., D.S.O., O.B.E., R.F.A.

MACGREGOR MEMORIAL MEDALS.

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June. —

(a) For officers—British or Indian—silver medal.

(b) For soldiers—British or Indian—silver medal, with Rs. 100 gratuity.

3. For specially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for special good work.

4. The award of medals is made by His Excellency the Commander-in-Chief as Vice-Patron, and the Council of the United Service Institution who were appointed administrator of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal:

Note.

(i) Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.*

(ii) When the work of the year has either not been of sufficient value or has been received too late for consideration before the Council meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MacGregor Memorial Medalists.

(With rank of Officers at the date of the Award).

1889... BELL, COL. M.S., V.C., D.E. (specially awarded a gold medal.)

1890... YOUNGHUSBAND, Capt. F. E., King's Dragoon Guards.

*N. B.—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves; also those serving in Auxiliary Forces, such as the Volunteers and Corps under Local Governments, Frontier Militia Levies and Military Police, also all ranks serving in the Imperial Service Troops.

MacGregor Memorial Medalists—contd.

- 1891...SAWYER, Major H. A., 45th Sikhs.
 RAMZAN KHAN, Havildar, 3rd Sikhs,
- 1892...VAUGHAN, Capt. H. B., 7th Bengal Infantry.
 JAGGAT SINGH, Havildar, 19th Punjab Infantry,
- 1893...BOWER, Capt. H., 17th Bengal Cavalry (specially awarded a gold medal).
 FAZALDAD KHAN, Dafadar, 17th Bengal Cavalry.
- 1894...O'SULLIVAN, Major G. H.W., R.E.
 MULL SINGH, Sowar, 6th Bengal Cavalry.
- 1895...DAVIES, Capt. H. R., Oxfordshire Light Infantry.
 GANGA DYAL SINGH, Havildar, 2nd Rajpute.
- 1896...COCKERILL, Lieut. G. K., 28th Punjab Infantry.
 GHULAM NABI, SEROY Q. O. Corps of Guides.
- 1897...SWYAYNE, Capt. E. J. E., 16th Rajput Infantry.
 SHAHZAD MIR, Dafadar, 11th Bengal Lancers.
- 1898...WALKER, Capt. H. B., Duke of Cornwall's Light Infantry.
 ADAM KHAN, Havildar, Q. O. Corps of Guides.
- 1899...DOUGLAS, Capt. J. A., 2nd Bengal Lancers.
 MIHR DIN, Naik, Bengal Sappers and Miners.
- 1900...WINGATE, Capt. A. W. S., 14th Bengal Lancers.
 GURDIT SINGH, Havildar, 45th Sikhs.
- 1901...BURTON, Maj. E. B., 17th Bengal Lancers.
 SUNDAR SINGH, Colour Havildar, 31st Burma Infantry.
- 1902...RAY, Capt. M. R. E., 7th Rajput Infantry.
 TILBIR BHANDARI, Havildar, 9th Gurkha Rifles.
- 1903...MANIFOLD, Lieut.-Col. C. C., I.M.S.
 GHULAM HUSSAIN, Lance-Dafadar, Q. O. Corps of Guides.
- 1904...FRASER, Capt. L. D., R.E.A.
 MOGHAL BAZ, Dafadar, Q. O. Corps of Guides.
- 1905...RENNICK, Maj. F., 40th Pathans. (specially awarded gold medal).
 MADHO RAM, Havildar, 8th Gurkha Rifles.
- 1906...SHAHZADA AHMAD MIR, Risaldar, 36th Jacob's Horse.
 GHAFUR SHAH, Lance-Naik, Q. O. Corps of Guides Infantry.
- 1907...NANKER, Capt. M. C., 92nd Punjabis.
 SHEIKH USMAN, Havildar, 103rd Mahratta Light Infantry.
- 1908...GIBBON, Capt. C. M., Royal Irish Fusiliers.
 MALANG, Havildar, 56th Punjab Rifles.
- 1909...MUHAMMAD RAZA, Havildar, 106th Pioneers.

MacGregor Memorial Medalists—contd.

- 1910...**SYKES**, Maj. P. M., C.M.G., late 2nd Dragoon Guards (specially awarded a gold medal).
TURNER, Capt. F. G., R.E.
KHAN BAHADUR SHER JUNG, Survey of India.
- 1911...**LEACHMAN**, Capt. G. E., The Royal Sussex Regiment.
GURMUKH SINGH, Jemadar, 93rd Burma Infantry.
- 1912...**PRITCHARD**, Capt. B.E.A., 83rd Wallahabad Light Infantry, (specially awarded a gold medal).
WILSON, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
MOHIBULLA, Lance-Dafadar, Q. V. O. Corps of Guides.
- 1913...**ABBAY**, Capt. B. N., 27th Light Cavalry.
SIRDAR KHAN, Sowar, 39th (K.G.O.) Central India Horse.
WARATONG, Havildar, Burma Military Police (specially awarded a silver medal).
- 1914...**BAILEY**, Capt. F. M., I.A. (Political Dept.)
MORSHEAD, Capt. H. T., R.E.
HAIDAR ALI, Naik, 106th Hazara Pioneers.
- 1915...**WATERFIELD**, Capt. F. C. 45th Rattray's Sikhs.
ALI JUMA, Havildar, 106th Hazara Pioneers.
- 1916...**ABDUR RAHMAN**, NAIK 21st Punjabis.
ZARGHUN SHAH, Havildar, 58th Rifles (F.F.) (Specially awarded a silver medal).
- 1917...**MIAN AFRAZ GUL**, Sepoy, Khyber Rifles.
- 1918...**NOEL**, Capt. E. W. C., Political Department.
- 1919...**KEELING**, Lt-Col. E. H., M.C. R.E.
ALLA SA, Jamadar, N. E. Frontier Corps.
- 1920...**BLACKER**, Capt. L. V. S., Q. V. O. Corps of Guides.
AWAL NUR, C. Qm. Havildar, 2nd Bn. Q. V. O. Corps of Guides.
 (Special gratuity of Rs. 200.)
- 1921...**HOLT**, MAJOR A. L., Royal Engineers.
SHER ALI, Sepoy No. 4952, 106th Hazara Pioneers.
- 1922...**ABDUL SAMAD SHAH**, Capt. O.B.E., 31st D.C.O. Lancers.
NUR MUHAMMED, Lance Naik, 1st Guides Infantry F. F.

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SOME ASPECTS OF STAFF WORK.

A LECTURE DELIVERED BEFORE THE UNITED SERVICE INSTITUTION
OF INDIA

BY

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Commandant, Staff College, Quetta.

I DEEM it a great honour to have been asked to read a paper before you this afternoon. The subject on which I have been asked to speak is staff work—a large subject with which it is, of course, impossible to deal comprehensively in the time at my disposal. I had hoped that before addressing you I would be able to obtain a copy of the new Field Service Regulations, Part I, in which, as you know, the revised Staff Manual will be incorporated. The book, however, I regret has not come to hand in time and, therefore, I propose to devote my remarks to certain ideas on one aspect of staff work. I am afraid that there is nothing new in anything I wish to say, but no reflection by officers of the staff on their own work is ever profitless. I must also explain that I am really talking of staff duties in war, although my remarks are equally applicable to peace conditions.

We have good authority for saying that no man can serve two masters but the unfortunate staff officer has to serve no less than three—A staff officer has :—

Firstly—his duty towards commander.

Secondly—his duty towards other members of the staff

Thirdly—his duty towards the troops.

Given professional knowledge, there is no great difficulty in carrying out the first and second of these duties. The third duty,

the duty towards the troops, is however much more difficult. It is of this duty that I propose to speak to-day.

Technically speaking staff officers have no responsibility of their own. They speak and act on behalf of their commander. His is the ultimate responsibility if things go wrong — his is the credit when things go right. This of course is quite proper.

Actually, however, the responsibility of the staff is very great and all the greater because they represent not their own individual authority, but that of someone else—namely the commander.

Every soldier knows that every body of troops, great or small, reflects very strongly the personal influence of the Commander. In large formations it may take some time before the result of that influence makes itself manifest, but all the time that influence is at work for either good or bad. That influence of the commander on the troops is exerted both by the commander personally and directly, and also through his staff.

If that indirect influence of the commander through the staff is to produce the best effect and the maximum effect, the staff must possess two main qualifications, namely:—

- (i) Professional staff efficiency.
- (ii) Suitable personality.

What constitutes professional efficiency on the part of a staff officer? I suggest to you that it can be classified under the following headings:—

- (i) Possession of actual military knowledge.
- (ii) Recognition of the moral effect of good staff work.
- (iii) knowledge of the organization of the staff.
- (iv) Power to organize and decentralize responsibility within his own sphere.
- (v) Observance of the correct chain of command.
- (vi) Recognition of the value of personnel liaison.

Possession of actual military knowledge.

There is little I need say about actual military knowledge. It can only be attained by study, reflection and experience. Under this heading, however, I include those qualities of intelligent

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imagination and forethought which are essential in all members of the staff, if the army is to be maintained on up to date lines. I say 'essential', because the progress of science must be studied and foreseen. Finally, the results must be applied to the resources of the army with imagination tempered by prudence so that the insurance premium of the army to the State in peace may be kept as low as compatible with efficiency and safety; and so that war, when it does come, may be brought to a successful conclusion as quickly as possible, as economically as possible, and with the minimum human suffering and loss of life.

Recognition of the moral effect of good staff work.

No army or body of troops can be efficient in which the Higher Command thereof is the object of hatred, contempt, disrepute or ridicule. Any or all of these feelings can be produced by bad staff work. It is with our own army—an army consisting largely of, and officered mainly by, Britishers—that I am dealing to day. Therefore the psychology which we have to consider especially is that of the British born. I think you will agree that the Britisher is an easy man to lead, but a hard one to drive. He is an ardent supporter of individual freedom. He claims personal independence; he is naturally intolerant of restraint; and he is apt to be a critic, and a captious critic at that, of superior authority. If the staff work that he sees is careless, badly worded, untidy, rudely or unsympathetically expressed, or containing any of the other faults which we include in bad staff work, then the effect on him is to produce one or other of the feelings of hatred, contempt or ridicule.

On the other hand good staff work engenders a feeling of confidence and evokes action correspondingly good and thorough on the part of the recipient.

"Whatever is done within an army", says von der Goltz, "must always be aimed at increasing its moral force". This question of the moral effect of good and bad staff work is one to which often sufficient importance is not attached.

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Knowledge of the organization of the staff.

Again it is necessary to emphasize the fact that we are dealing with the British staff. This is the more necessary because our staff organization is different to that of every other country. All continental and other nations organize their staff under the control of a Chief Staff Officer. We organize our staff under a trio of three principal staff officers, the C. G. S., the A. G. and the Q. M. G. At the end of the war, a committee sat in France to consider whether it was advisable to change our system and model our organization on the lines of other nations. It was eventually decided that no change was necessary and that our staff organization for peace and war is to remain as it now is.

One reads and hears a lot about "unity of command"—how it won the war; how essential it is; and yet our staff organization is, at first sight, a negation of the principal of unity of command. Taking the late war right through, however, that organization proved itself remarkably efficient. The reason I think can again be attributed to our national psychology. We seem to have a natural instinct for team work; and this instinct is fostered, if indeed not entirely produced, by our public school training.

Any organization that one sets up has inherent advantages and disadvantages. The chief advantages of our organization are, I think, three:—

First—that the heavy load of work and responsibility which rests on a Chief of Staff is considerably, though not proportionately, lessened when divided amongst three.

Secondly—that replacement is easier in the case of promotion, of casualty or of other cause for change.

Thirdly—it has successfully stood the test of a war of the greatest magnitude.

The main disadvantage is that of triple control, to which I have already referred. There are also other disadvantages which

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are apparent—and I need not waste time on them. There is however, one disadvantage, not quite so obvious at first sight, inherent in his system, to which I would like to refer, and that is the danger of staff officers specializing too much. There is a tendency for officers to start in one class of work, "G", "Q" or "A", and to be employed in that class of work alone throughout the rest of their staff service. That is natural because it is easier from every point of view, but of course it is wrong.

It appears to me, however, that all these disadvantages can be more than minimized, they can almost entirely be obviated provided the staff will recognize three facts:—

Firstly—Although there are three branches of the staff, there are not three staffs. There is, there must be, and there can only be, ONE STAFF. In that one staff, no branch is more important or bears more responsibility than any other. Each has its own particular work to do, and the work done by all three is equally necessary to make the army machine run efficiently. This is the main principle in the staff organization of the British Army.

Secondly—No staff officer is really competent unless he understands the work not of one branch but of all three branches, and is capable at any moment of taking up work straight away in any branch. This means that we must see that staff officers obtain adequate instruction in, and experience of all classes of staff work.

Thirdly—The principle of unity of command must be reintroduced into the organization by fixing definitely the responsibility for co-ordination of staff work.

In the old F.S.R. Part II, and Staff Manual it was definitely laid down that although the power and responsibility of co-ordinating staff work at General Headquarters was vested in the Commander-in-Chief, he was empowered and by implication was

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expected to delegate the responsibility for co-ordination to his C.G.S. In the case of subordinate formation, however, the question was left much more indefinite. Staff Manual, war (1912) says:—

“ In subordinate commands, the same general principle should be followed * * * the amount of authority to be delegated to the Senior General Staff Officer being at the discretion of the responsible commander”.*

In actual practice in war, the result of this worked out in three ways—

First—There was the commander who desired to do all co-ordination himself. This was all right in times of comparative quiet, but when heavy and continuous fighting started, the commander became so occupied with his more legitimate work that he was obliged to hand the responsibility for co-ordination to the Senior General Staff Officer. That meant; at once temporary friction in the machine owing to change of routine; the remainder of the staff not having been in the habit of looking to the Senior General Staff Officer for co-ordination, and that Officer not have ing been in the habit of doing it. It is perhaps worth while remarking here what an important part, habit, and, routine, can play in war.

Secondly—Some commanders did a certain amount of co-ordination themselves and delegated the responsibility for the remainder.. The result in battle was exactly the same: namely, that all co-ordination necessarily fell on the Senior General Staff Officer. The dislocation of work, however, in this case was not as grievous as in the former case.

Thirdly—Some commanders delegated the whole responsibility for co-ordination of staff work to Senior General Staff Officers. This proved much the best method.

I have not yet seen the proof copy of Field Service Regulations, Part I, and so I cannot tell you what the final decision is

* Staff Manual, Ch. II, Sec. 5, para 6.

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on this point ; but I anticipate that the advantage of commanders of subordinate formations delegating the responsibility for the co-ordination of staff work to their Senior General Staff Officer will be more emphatically stated than in previous Field Service Regulations.

It may be, and is sometimes, argued that co-ordination should be delegated, not necessarily to the Senior General Staff Officer, but to the staff officer of the formation who is senior by army rank. This problem should be studied, like all military problems, from the standpoint of "What is the object?". The object of all war is to defeat the enemy. That can only be done in battle. The plans for, and the conduct of, the actual fighting are the work of the General Staff. The other two branches provide the men food, and material, to enable the fighting to be carried out. They therefore, deal only with the means to the end—the General Staff with the end itself. Therefore it appears logical that the duty of co-ordination should be allotted to the General Staff, that is to the branch, not to the individual.

Organization and delegation of responsibility.

Nature has endowed man with a certain modicum of strength. Everyone is able to endure mental and physical strain up to a certain point. The moment that point is exceeded, the strain becomes too severe and there is a danger of breakdown. Breakdowns are inconvenient from every point of view, especially in war, and therefore should be avoided. Staff work must be organized so that everyone does his full share of work up to the capacity of the average man, but is not subjected to undue strain. This entails proper decentralization of responsibility. All sound business firms recognize the importance of this organization and if it is true when mere profit is at stake, how much more necessary is it when the stake is the safety of the Empire, and when the price to be paid is counted in the lives of men, not in pounds sterling.

Decentralization is also necessary in order that the senior staff officers, like the Commander, may not lose sight of the

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bigger issues by becoming too deeply involved in a mass of detail.

If decentralization is to be a real live factor, it follows that every link of the chain must pull its weight. One has, certainly in the past, seen links which did not pull their weight, while others, to restore the balance, were doing more than their fair share. One cannot insist too strongly on the evil of this. It is uneconomical, and proper economy in the expenditure of brains or mental output of human beings is as necessary as proper economy in sovereigns or rupees. If a staff officer or any other officer or man cannot do his fair allotted portion of the work and shoulder his delegated responsibility, he should be replaced by someone who can do so. The army is not a charitable institution and in no case is it fair or economical that someone else should support an undue strain to make up for the limitations of the inefficient.

Observance of the correct chain of command.

The chain of command in the army is the outcome of the same principle of organization and decentralization which I have just mentioned. There is perhaps nothing more prone to produce friction between the staff and the troops than non-observance of the chain of command. This chain has been very carefully worked out as the result of experience, with a view to obtaining from each individual the maximum results with the most economical working. To obtain these results, however, a proper working of the *whole* machinery is required. If the staff deprive any subordinate commander of his proper status by encroaching on his responsibility, or if, by undue interference, or in any other way, they undermine his position vis a vis his command they not only produce friction, but they militate against the moral of the army, and are guilty of the worst staff crime—disloyalty. Loyalty towards his commander and towards the staff is demanded necessarily from every staff officer. Still more is loyalty demanded towards subordinate commanders, because whereas disloyalty in the first two cases is immediately apparent and can be readily dealt with, in the third case—the case of the troops—the disloyalty is not so

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immediately apparent to the responsible authority, and the sufferers are not in a position themselves to remedy the evil. The secret of knowing how to avoid this danger of disloyalty to subordinate commanders lies in the maintenance of a proper horizon or perspective. This is by no means easy to do, because the horizon of every formation is different. For instance, the horizon of the staff at General Headquarters is essentially different to that of the staff of an Infantry Brigade. It is very necessary that all staff officers should appreciate this difference in horizon, and should learn to adjust their mental attitude quickly, to the horizon of the particular formation to which they may be posted.

Value of personal liaison.

Perhaps one of the greatest lessons of the war is the value of personal liaison. If staff officers can see commanders and troops and talk over things personally, how many misunderstandings disappear, how much correspondence diminishes, how much more smoothly the machine runs and how much happier is life for everyone. It is true that problems must be argued, decisions must be given in writing, and necessary records must be kept. Moreover India as a country is large, distances are great and travelling is expensive and economy must be exercised. But on the other hand the more unmoveable an officer is the more correspondence accumulate around him: the greater the possibility of misunderstandings and of uneconomical working generally. The more that staff officers of all grades can visit the troops, show themselves and prove their desire to help, the higher will be the moral of the army, the more efficient will be the weapon for which the State pays, and in the end, despite train fares, the greater the economy resulting. The first and perhaps still the best writer on staff work, von Schellendorf says "In devoting his energies to mental qualifications the staff officer *** by keeping himself constantly in contact with troops should never lose a fellow feeling for them or their wants" *. This is as true to-day as when the book was first written.

* "The Duties of the General Staff" by the late General Brouart von Schellendorf, Fourth Edition, 1905, Chap. I, p. 8,

Personality.

Lastly personality—a gift with which one is, or is not endowed at birth, but also a gift which one can do much by one's own efforts to cultivate. In personality can perhaps be included :—

- (i) Judgment of character. This is the result of study and experience. The staff officer should never forget that every man requires slightly different handling according to his particular psychology.
- (ii) Politeness—a most essential quality especially when dealing with the Britisher who is more easily led than driven.
- (iii) Tact, which is the resultant of judgment, politeness and good feeling.
- (iv) Straight forward dealing—an attribute especially necessary towards Britishers and Orientals.
- (v) Helpfulness—perhaps the greatest virtue of all.
- (vi) Patience, which enables one to maintain a cool and calm demeanour.
- (vii) Unfailing good temper and cheerfulness, however tired one may be, or however bad the situation.
- (viii) True optimism, based on knowledge and self-confidence.

There are many other points on which I should like to touch, but time prevents my discussing them. I can only reiterate that if the staff officer will bear in mind and follow the points I have mentioned as necessary for good staff work and combine them with a gentlemanly, human and helpful demeanour, he will go a long way towards assisting his commander to get the best out of the troops. For what else is he appointed ?

THE BATTLE OF SHAIKH SAAD.

BY

Major-General W. D. Bird, C.B., C.M.G., D.S.O.

(This narrative is based on the war diaries, to which I was most kindly permitted to have access. I was also able to consult "*My Campaign in Mesopotamia*," by Major-General Sir Charles Townshend).

BEFORE the advance on Baghdad was undertaken by the 6th Indian Division, the 6th Cavalry Brigade and other troops, under Major-General C. V. F. Townshend, towards the end of November, 1915, a promise had been made by the Government that the 3rd and 7th Indian Divisions would, after some exchanges with Indian units that were serving in Egypt, be transferred from France to Mesopotamia. Although it was expected that these troops would begin to arrive in the country early in December, the situation created by the result of the battle of Ctesiphon was considered to be so serious that Lieutenant General Sir John Nixon, who was Commander-in-Chief in Mesopotamia, was informed that the 34th and 35th Indian Infantry Brigades, three Field Batteries, one regiment of Indian Cavalry and one company of Sappers and Miners would be despatched forthwith from India to Mesopotamia, embarking at Bombay between the 2nd and 6th December.

Sir John, who had been at the front, had gone after the action back to Basrah for the purpose of supervising the despatch up the Tigris of these reinforcements. But before their arrival Townshend had fallen back to and shut himself up in Kut-al-Amarah, after sending down river the 6th Cavalry Brigade, which met the first of the reinforcements from France and Egypt, the 28th Infantry Brigade, under Major-General Sir George Younghusband, on the 9th December at Ali-al-Gharbi.

About 16,000 fighting men belonging to a cavalry and camelry brigade and the 35th, 38th 45th, and 51st Turkish divisions, accompanied by a number of Arabs, closed in on the 7th December on the force under Townshend, which consisted of about 12,200 men of whom 2200 were in hospital. From the 10th to the 13th December the enemy pressed the garrison so hard that Townshend felt obliged to telegraph to Nixon in regard to his anxiety lest the ammunition should prove to be inadequate; and he also expressed the hope that the place would be relieved within ten or fifteen days.

For some time after their activity on the 10th to the 13th December the Turks remained comparatively quiet, either because of their losses or because they were awaiting the arrival of reinforcements.* After sapping forward close to the fort, a small work on the right of the British line of defence, the enemy made a violent assault on it during the 24th and 25th December, in the presence of the German Field Marshal Von der Goltz, which was repulsed. The Turks now converted the siege into a blockade, and on the 27th Townshend telegraphed that they had drawn back, relaxing their hold on the town, that their forces had been placed astride the Tigris, and that it appeared as if the enemys' object was to entrench a position for defence against the relieving force.

The reports which had been received from Townshend appeared to render the early relief of his force a matter of necessity, and in view of the very serious shortage of river transport available for the British in Mesopotamia, it was fortunate that orders had already been given for the construction of a raised roadway† along the Shatt-al-Arab and Tigris from Basrah to Amarah. In general it was now the policy of Sir John Nixon first to provide a force to cover the arrival and movement of reinforcements up river by sending forward certain units by steamer. He would also despatch by ship the reinforcements that were to be moved to strengthen the detachment which was holding Nasiriyah. Other troops that were

* Apparently the 52nd division reached the front in this interval.

† There were no metalled roads in Southern Mesopotamia; such as existed were mere tracks over the plain where scrub had been cleared and ramps made in the banks of dry canals and channels.

to form part of the corps which was destined to attempt the relief of Kut-al-Amarah, would, as they arrived at Basrah, proceed by march route to Amarah. Units which reached the country too late to be able to march would be moved to the front in the river flotilla, and meanwhile the shipping would be used for the movement of supplies and material to Amarah and other places where depots would be formed. Roughly speaking the time required for the voyage of a steamer* with troops from Basrah to Amarah was three and a half days, and Amarah was one days' steaming from Ali-al-Gharbi. The distance from Basrah to Ali-al-Gharbi could not be covered in less than fourteen days by marching, and the time that would be occupied in moving a party by road from Basrah to Amarah was estimated as about ten days.

Lieutenant-General Sir F. J. Aylmer, who had been nominated to command the Tigris Corps of two divisions and other troops, as the relieving force had been named, had meanwhile also been pushing forward at Amarah the arrangements for the advance. On the 19th and 22nd December secret instructions were issued giving the number of troops which it was hoped to concentrate at Ali-al-Gharbi; that supplies for one month would, if possible, be taken up river, as well as horses and high explosive and shrapnel shell for the garrison of Kut-al-Amarah; and that the field service scale of transport, without tents, would be adopted for the troops, but that requirements for the carriage of tents should also be submitted.

The corps would probably be organized as one division with corps troops, but this organization was not in fact followed in the first instance. The former, the 7th Division, under General Young-husband would comprise the 19th, 21st and 28th Infantry Brigades, the 16th Cavalry (less one squadron) the 107th Pioneers, the 3rd or 4th Company of Sappers and Miners the 9th Field Artillery Brigade of eighteen 18 pounders, the 61st Field Howitzer Battery of six 4.5 inch howitzers, and other units. The Corps Troops

*As a rule a barge was lashed to each side of a steamer, and a vessel, with its barges, could carry from 500 to 800 infantry, or a battery, or about three troops of cavalry.

were to consist of the 35th and 9th Infantry Brigades, one squadron of the 16th Cavalry, the 1st Sussex Territorial Field Battery of four 15 pounders, two sections of the 23rd Mountain Battery, the 72nd and 77th Heavy Howitzer Batteries, each of four 5 inch howitzers, one section of the 104th Heavy Battery of 4 inch guns, two provisional battalions composed of drafts for the units in Kut-al-Amarah, the 13th Company of Sappers and Miners, a Squadron of the Flying Corps and Signal and Administrative formations. The 6th Cavalry Brigade would include the 14th Kings' Hussars, the 4th Cavalry, the 7th Lancers, the 33rd Cavalry, (one or more squadrons had been detached from the 7th and 33rd) two sections of S. Battery Horse Artillery and Signal and Administrative units. Subsequently General Younghusband was informed that units as they reached Ali-al-Gharbi were to be so encamped as to facilitate an advance by the 7th Division and Cavalry Brigade up the right bank of the Tigris, and by the remainder up the left bank of the river.

Owing to the prevalence of strong winds at Christmas time it had not been practicable until the 27th December to make a reconnaissance with either of the two British aeroplanes that were then available. On this date it was ascertained that there were 100 tents at Shaikh Saad (a tent might accommodate twenty-five men), that the camps near Kut-al-Amarah were somewhat larger than had been the case before, and that a bridge of boats, with ramped approaches was in position at the southern portion of the Shumran bend; it was moved subsequently to the western portion. On the next day Townshend reported that the Turks were busily entrenching on the right bank of the Tigris to the west of Kut-al-Amarah, and that at least a division (that is from 3000 to 6000 men) with a considerable quantity of transport had marched past the town and was bivouacking on the left bank three miles to the north-east of the fort.

General Aylmer now sent an enquiry to General Townshend as to the number of troops that would be available, out of his garrison to cooperate with the Tigris Corps on the 10th January. Townshend had already forwarded a message that, on the 27th

December, the effective strength of the garrison in combatants was 6764 infantry, 1051 artillery, 439 sappers and miners and 204 signal service, or a total of 8698, besides a couple of hundred cavalry. He now telegraphed by wireless that it was understood from prisoners that the 36th division was following the 52nd division which was known to have arrived at Kut-al-Amarah. "We have", he continued, "quite sufficient numbers here upon us as it is without this extra division. I am sure you do not require my reasons for my serious anxiety on the score of any more reinforcements reaching the enemy. I hope if you start on January 3rd, as I understand you do, that you will get here much sooner than January 10th". At the end of the telegram there was a request for information as to the strength of the relieving force, and as to the movements of the Russians, who had detached troops from the army of the Caucasus to cooperate with the British by advancing through Persia on Baghdad. It was not until two days later that a statement was despatched that only some 5000 rifles and certain guns would be available to support the operations of the Tigris Corps. It was also pointed out that the garrison did not possess the means of bridging the Tigris, but that there were about fifty native barges (mahailas) which could be used with his single river steamer, a tug, for the transportation of troops to the right bank of the river, and rafts could also be improvised for this purpose.

Sir Fenton Aylmer took a day to consider General Townshend's appeal for the early relief of the garrison, but at once replied to the request for news. The commander of the 6th Division was informed that the composition of the relieving column would be about two divisions and a cavalry brigade. The Russian force that was operating in Persia under General Baratoff consisted of about 15,000 troops, who were mainly cavalry, with 14 guns and more than 100 motor lorries. This force had split up into a number of columns one of which would advance as quickly as possible in Karmanshah.

On the 30th December General Aylmer addressed a most pertinent review of the situation both to Sir John Nixon and to

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General Townshend. After pointing out the disadvantages that were evidently involved in a hurried advance, and observing that the date which had been mentioned had been put forward after a conservative estimate of the factors, he stated that he was, however, prepared to incur great risks in order to render assistance to the garrison of Kut-al-Amarah in case of imperative necessity. By far the best plan of action, he continued, would be to carry out an advance from Shaikh Saad with the whole corps, and in any case it was essential to put off as long as possible the adoption of any particular project, since hurry must connote inefficiency. In conclusion General Townshend was asked to give full weight to these considerations before fixing a definite date on which the relief must be effected.

Sir John Nixon concurred with General Aylmer in giving preference to the method of methodical advance in force, unless it became imperative to effect the relief of the garrison.

General Townshend did not immediately send a direct reply to this appeal, but telegraphed that cases of self mutilation, and of sleeping by sentries when on their posts, were occurring among the garrison, that documents calling on the Indian soldiers to rise and overpower their officers had been fixed by the enemy on the wire in front of our trenches, and that some soldiers had been overheard using seditious language in the town of Kut-al-Amarah. But, on the 1st January, 1916, he telegraphed that the Turks seemed to be turning the siege into a blockade, and that only in the case of the direst necessity would an appeal be made for immediate assistance from the relieving force. General Aylmer therefore continued his preparations with the design of undertaking a forward movement early in January.

Since their arrival at Ali-al-Gharbi the troops under Major-General Sir George Younghusband had hardly been molested except for intermittent firing into the camp by night, although a few Turkish Cavalry had, about the 21st December, appeared in support of the Arab horsemen who, as usual, hung about the area occupied by the British. On the 31st December General Younghusband had been warned that the 7th Division and Cavalry

Brigade might be required to advance from Ali-al-Gharbi on the 3rd January, but next day, owing to the immense amount of preparatory work still to be completed, it was decided to postpone the forward movement until the 4th. Aylmer reached Ali-al-Gharbi on the 2nd January, and on the 3rd issued written instructions to Sir George Younghusband. In these Younghusband was informed that the first echelon of the crops was placed under his orders, and was to begin to move forward on the 4th January advancing on the following days as far as the neighbourhood of Shaikh Saad. Although it was possible that conditions in Kut-al-Amarah might become so serious as to oblige the first echelon to push on from Shaikh Saad without awaiting the arrival of reinforcements, it was not at the moment anticipated that such a contingency would arise. In no circumstances, however, was General Younghusband to go forward from Shaikh Saad without direct orders from General Aylmer.

From the information, continued Sir Fenton, that had been obtained by the cavalry and airmen and from other sources, it was estimated that the Turkish army now consisted of the 35th* division, 2500 fighting men, the 38th division, 2500 fighting men, the 45th division, 3500 fighting men, the 51st division, 6500 fighting men, the 52nd division 7500 fighting men, or 22,500 in all. The enemy possessed 72 guns of which 35 were quick-firing field guns, 19 quick-firing mountain guns, 13 old pattern field guns, 5 heavy guns and 2 howitzers. It was believed that there were in the neighbourhood of Shaikh Saad 1100 Turkish camelmen, 900 cavalry, 2 small guns, 2 or more machine guns and perhaps an infantry battalion. On the other hand it was not impossible that the enemy division which had been seen to move eastwards past Kut-al-Amarah on the 28th December might have reached Shaikh Saad, and if so the bulk of these troops would probably be found on the left bank of the Tigris. The enemy had, however, transferred a couple of guns on rafts across the Tigris

* The 35th and 38th divisions were composed mainly of Arab personnel, the 45th had suffered 3500 casualties at the battle of Ctesephon, the 51st & 52nd were Turkish divisions which had arrived in the country, the first just before, the other after this battle

at a point below Kut-al-Amarah. The main body of the Turkish army was apparently round Kut-al-Amarah, but there were some troops in the Sinn positions to the east of the town. It seemed therefore probable that, if Younghusband were obliged to hasten to the relief of the place, he would find the enemy in position astride the Tigris to oppose his advance. General Younghusband was also warned that the Arabs on both banks of the Tigris above Ali-al-Gharbi might on the whole be regarded as hostile to the British. In conclusion directions were given as to the flights that were to be made by the aeroplanes for purposes of reconnaissance after the arrival of the troops at Shaikh Saad; and it was stated that General Aylmer hoped to bring the second echelon, or remainder of the Corps, forward from Ali-al-Gharbi on the 6th January.

On the 3rd January Aylmer received a telegram from General Headquarters in which the situation was reviewed by the Commander-in-Chief. Sir John Nixon now estimated the strength of the relieving force as 15,000 bayonets, 1500 sabres and 46 guns or perhaps from 18,500 to 19,000 fighting men. On the right bank of the Tigris and nine miles to the west of Kut-al-Amarah he placed the 45th and 36th Turkish divisions, aggregating 11,500 fighting men with 41 guns; the 51st, 52nd and 38th divisions were, it was reckoned, on the left bank of the river and engaged in the investment of Kut-al-Amarah, and their fighting strength was estimated as 12,900 men with 24 guns, lower down the left bank, and possibly at the Sinn position, was the 35th division of 2500 fighting men with 18 guns. At Shaikh Saad on both banks of the Tigris there were four battalions of gendarmerie, 300 cavalry and 1200 camelmen. These estimates--the total amounted to about 30,000 fighting men with 83 guns--were, it was pointed out, based on maxima, especially as regards guns; but all of the enemys' divisions, except the 36th, (which, if it had come up, had recently arrived at the front) had been severely handled in action* by our men,

* The 35th and 33th divisions had been defeated in the earlier battles of the campaign, the 45th had lost heavily at Ctesiphon, the 51st had fought in this battle, and the 52nd had apparently made the abortive attack on the fort at Kut-al-Amarah.

and their moral must have been affected unfavourably. Sir John considered that it was more likely that the Turks would concentrate their forces for battle to the west of Kut-al-Amarah rather than afford the British the opportunity of defeating them in the localities downstream. After having effected the relief of Kut-al-Amarah Aylmer was consequently instructed to throw up entrenchments in the vicinity of the town, and to await the arrival of reinforcements before taking further aggressive action. Next day, however, General Aylmer was asked to consider whether, in view of the strength of the Turkish army, it would not be wiser, after having joined hands with General Townshend, to fall back on Shaikh Saad, and there await the remainder of his army corps.

It is certainly difficult, in view of what actually occurred and of the estimates of the enemys' forces that had been made by the British commanders, to understand their confidence in the early relief of Kut-al-Amarah. The tactical balance of advantage, so far as the ground was concerned, inclined strongly to the side of troops whose object it would be to prevent the junction of the two British forces; and, owing to the absence of drinkable water, except in the Tigris, and to the lack of land transport in the Tigris Corps, it would be difficult for the British to redress the balance by means of manoeuvre, for they would be tied to the vicinity of the river. General Townshend's troops were enclosed in a loop of the Tigris. The narrow land frontage would no doubt be easy to hold against an attack, but it could just as easily be secured by the enemy against a sortie, so that only a small force would be necessary to carry out the investment. The neighbourhood of Kut-al-Amarah was such as to afford a besieging army unusual facilities for checking and delaying any forces that might advance up the Tigris to the relief of the garrison. It is true that the Turkish troops would be fighting astride a river three hundred yards wide, and possibly without the means of direct communication between the divided groups. Food and

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ammunition would also have to be sent to them by land, since river traffic could be stopped by the force holding Kut-al-Amarah, and transportation was not, as a rule, efficiently organized in the Turkish army. On the other hand from Sannaiyat fifteen miles away to Hannah twenty-five miles distant from the town, the space between the Tigris and the Suwaikiyah marsh was not more than a mile in width; and the marsh, although not impassable by men on foot, could not be crossed by a force of all arms, and was so extensive as practically to prohibit an advance round it. To the west of Sannaiyat also lay the Sinn position, which had been held by the enemy at the battle of Kut-al-Amarah. The ground on the right bank of the Tigris and to the east of the Hai was so much broken by canals and channels, which had either fallen into disuse or were still employed during the flood season, that delaying action would be facilitated; and here too lay the right of the Sinn position. Portions of the Turkish army, such as the 35th, 38th and 45th divisions, were no doubt not highly efficient. But when on the defensive weakness as regards training and *moral* are, on the whole, of less importance than when attacking, for cohesive movement is more difficult, and demands higher qualifications than are required to maintain a position. Moreover a force so hastily brought together as that under General Aylmer, must evidently be wanting in the unity of purpose which is so important an element of power when attacking.* Again the bulk of the troops had been accustomed to the very different conditions of trench warfare, and the heavy losses that had been experienced by the units which had served in France had necessarily reduced their fighting efficiency.

A high wind, accompanied by rain, prevented the airmen from flying on the 3rd January, but a report came in from Arab sources of the presence of 4000 Turkish infantry on the left bank of the Tigris opposite to Hibsh, four or five miles below Sheikh

* For some reason the divisional and other staffs and the various administrative services were among the last of the units to reach Mesopotamia from France.

Saad, and of horsemen on both banks of the river ; and there were also rumours as to the presence of infantry above Shaikh Saad at the Wadi. In addition on the 4th General Townshend sent a message that two enemy divisions which had moved in a north-easterly direction past Kut-al-Amarah on the evening of the 3rd, had not made an attempt to attack the garrison, and had perhaps marched on to the Sinn position (on the left bank). Later in the day it was reported by him that another column of from 2000 to 3000 infantry, with six guns and a squadron of cavalry, had marched eastwards, and that a marked reduction was visible in the size of the Turkish camps on the right bank of the Tigris above the town of Kut-al-Amarah.

As a result General Aylmer telegraphed to Sir John Nixon that it did not appear as if the enemy would raise the siege without a serious struggle at some locality below Kut-al-Amarah, and that subsequently a second position might be occupied to the west of this place. The difficulty of arranging for the supply of forces pushed to the east of Kut might cause the Turks to postpone the actual occupation of a position below the town ; but so far as numbers were concerned it appeared as if they would be able both to invest the troops under Townshend and engage the relieving force in the Sinn positions with superior numbers.

At the same time General Younghusband, who had advanced to Kubai with the Cavalry Brigade, the 28th and 35th Infantry Brigades* and other troops, and was astride the Tigris, was informed that punitive detachments were not to be made against certain Arab villages the inhabitants of which had molested British shipping ; and he was told that, in view of the fact that it might be necessary to pause in some locality to the east of Kut-al-Amarah and there await reinforcements, measures were to be taken to choose and entrench a position at Shaikh Saad.

During the 5th January Aylmer telegraphed to General Headquarters suggesting that Major General G. Goringe, the commander of the 12th Division, should be ordered to advance from

* He was subsequently joined by the 19th Infantry Brigade.

Nasiriyah for a short distance up the Shatt-al-Hai, or if possible as far as Shattrah, in order to relieve the strain which was being imposed on the Tigris Corps. It was proposed that reports should be spread that an important movement had been undertaken, and the troops should act so as to give colour to them. Telegrams, in a cipher which could easily be unravelled by the enemy, were also to be sent to Townshend as regards the advance of a British force up the Hai to Kut-al-Amarah, in the hope of adding to the illusion. Sir John fell in with these proposals, and Goringe received instructions to advance with a force of all arms for one days' march up the Hai. He was authorised also to call up certain units from Kurnah should he consider this to be necessary. (Map)

General Younghusband moved to the eastern portion of the Musandak reach on the 5th January, small bodies of enemy cavalry being encountered on both banks of the Tigris. During the day reports came in to General Aylmer's headquarters from General Headquarters that, according to news which had been received, from agents, Nur-ud-Din Pasha, who was in command of the forces near Kut-al-Amarah, could dispose of 30,000 fighting men with 40 guns; and that, in spite of rumours of the movement of Turkish troops down the Euphrates, armed Arabs only were as yet in the field in this portion of the theatre of war. General Townshend also sent a statement that a column from five to six miles in length, and comprising 8000 fighting men was in movement down the left bank of the Tigris; that the Turkish camps on the right bank had disappeared from the areas above Kut-al-Amarah, while that on the left bank was reduced in size.

A Turkish aeroplane flew over Younghusband's column at noon. The result of the British aerial reconnaissance, which was carried out from Ali-al-Gharbi at about midday, disclosed the fact that there was more than an advanced guard at Shaikh Saad, for it was computed that some 10,500 men had been seen in its vicinity, and there were entrenchments on both banks of the Tigris near Hibsh.

From this information it might be assumed that the Turks intended to fight a battle, although the position of their right

which lay parallel to the course taken by the Tigris above, Shaikh Saad was somewhat unfavourable, and General Aylmer proceeded therefore to revise his plans. Younghusband was in consequence posted as to the situation in a telegram which came to hand at 8. p.m.; and he was warned that there were indications of the presence of a force at Shaikh Saad considerably larger than an advanced guard, that at least 10,500 troops had been seen, and that 8000 might come up on the left bank of the Tigris during the 6th January and fall on the British at the end of an indecisive engagement. He was told that the Corps commander did not desire to run the risk of even a modified check at Shaikh Saad, and he was directed, therefore, to hold the enemy in their positions with sufficient vigour to cause the Turks to show their hand, pending the arrival of the remainder of the column, which would reach the eastern end of the Musandak reach on the evening of the 6th January. A bridge was to be thrown across the Tigris at or near the positions gained on the 6th by Younghusband's troops; and information was to be supplied of the presence of any marshes that would interfere with manoeuvres to outflank the enemy.

In acknowledging these orders Younghusband observed that he could not obtain news of the existence of well made entrenchments near Shaikh Saad, and thought, therefore, that it was the enemy's intention to fall back. He believed also that the Turks had only a small number of guns whereas we were strong in artillery. An advance, he said, would be made at 8-30 a.m. on the 6th January, along both banks of the Tigris, and steps would be taken to clear up the situation and pin the Turks to their position, should they hold it. If all went well the troops of the first echelon would push on to Shaikh Saad, and there await the arrival of Aylmer with the second echelon. A bridge would be thrown as far forward as was compatible with safety.

The meaning of words is interpreted in conformity with the images that they evoke in the mind, but, as words can only give imperfect expression to what is thought, it is often most difficult accurately to convey the meaning that is desired. General Aylmer appears to have intended that the force under Younghusband

should follow the procedure indicated for an advanced guard, and limit its action to the securing of tactical points which might assist in the development of the attack by the main body. This is always far from being an easy task ; for when once troops are launched in attack it is hard to draw the line evenly between the feebleness which fails so to press the enemy as to force him to disclose his strength and positions, and the undue daring which involves the troops irreparably in a close combat. But when, as was the case in Mesopotamia, the ground is brown, absolutely flat and except for the Tigris and the dry channels leading from it, featureless, and is in places covered with the low banks of disused irrigation works and small scrub, and when even near objects are shrouded in haze or distorted by mirage, concealment is made so simple for the enemy that limited but effective action on the part of an advanced guard is almost impossible. It seems, however, that General Younghusband had taken a somewhat different view of the task that had been given to him, for he speaks of pinning the enemy to their position. It was, therefore apparently his intention to follow the general principle outlined in the Field Service Regulations, Part 1, 1909, for the conduct of a battle ; where it is stated " that the enemy must be engaged in sufficient strength to pin him to his ground, and to wear down his power of resistance, while the force allotted to the decisive attack should be as strong as possible."

General Aylmer made no reply to the telegram sent by his subordinate, and presumeably therefore it was accepted as satisfactory.

In a message that was received from General Townshend on the 5th, the total number of Turkish troops engaged in the investment of Kut-al-Amarah and in opposing its relief was estimated to amount only to 20,000 fighting men with 32 guns. It was stated, further, that a minimum of from 4000 to 5000 troops would probably be required to maintain the blockade of the town. General Townshend, however, had already reported the eastward march away from Kut-al-Amarah of five columns of troops.

one on the 28th December being estimated at 3000 fighting men, two others, each of a division, on the 3rd January, a force of from 2000 to 3000 fighting men on the 4th January, and finally a body of 8000 men on the 5th January. If these estimates are accepted as being approximately correct from 16,000 to 20,000 men, including cavalry, must therefore already have moved away from Kut-al-Amarah. According to the computations that had been made by the staff at General Headquarters, 30,000 was the maximum of the enemy's strength, hence not more than 10,000 Turks can now have been round the town; while according to General Townshend's own estimates the number was very much lower. General Aylmer's operations, then, had to all appearance so far eased the situation of the garrison that the danger of a successful assault by the enemy had, for the time being, become remote; although there was the possibility that the movements undertaken by the Turks were part of an elaborate scheme to throw General Townshend off his guard, and that these troops were still within easy reach of Kut-al-Amarah.

The various problems that have been set forth in the preceding paragraphs were of sufficient difficulty to tax the resources of the ablest minds, but they formed a tithe only of those which occupied Generals Nixon and Aylmer and their staffs; for their energies were already overburdened with the tremendous task of the hasty improvisation of a relieving force that faced them after the investment of Kut-al-Amarah. It must, therefore, have been as hard then as it is easy now to perceive that the situation had probably been changed in radical fashion by the movements of the enemy; and that, at the moment, the most important question was not whether the garrison of Kut-al-Amarah could sustain another assault, but whether its supplies,* as was later shown to be practicable, could be stretched out until the arrangements for the relief had been fully completed.

It is true that if the British made an immediate advance they might be able to engage and defeat the enemy before the arrival of the body of 8000 men that was said to have marched eastwards

* It was apparently believed at this juncture that full rations were available for the garrison until the end of January.

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from Kut-al-Amarah on the 5th January. But the later experience of the war had tended to show that such rapid victory was no longer to be expected; and it might be concluded, therefore, that the Turks would probably be able to complete their concentration before the British gained a definite advantage in a battle fought on the 6th January. The force that had been confided to General Aylmer was, as has been observed, still somewhat raw. Only one of the infantry brigades, the 35th from India, was composed of the units of which it had originally been formed or possessed its proper staff, the commanders were without intimate knowledge of each others' respective characteristics, and the troops were not acquainted with their leaders. The signal and other services had been improvised. It was desirable, therefore, to proceed with caution, and to take every possible measure requisite for the attainment of success. It seems, then, that the cause of the British would have been better served had General Aylmer at least concentrated at the Musandak reach on the 6th the whole of the troops now available, and subsequently undertaken a careful reconnaissance of the enemy's position before fixing a plan of action. The Turks would certainly be allowed more time in which to throw up entrenchments, but it was all to the good that they should have advanced so far to meet the British; for serious trouble must soon be experienced in providing for the maintenance of the enemy's forces at so great a distance from their advanced base at Shumran, and an opportunity might then occur of attacking them in difficulties.

Prior to the receipt of the latest of the instructions from Sir Fenton Aylmer, General Younghusband had decided on the course of action to be followed by his troops on the 6th. He contemplated that the first echelon should march to Shaikh Saad, and his plan of action was to threaten the enemy's left and at the same time to envelope and drive the forces that were on the right bank of the Tigris into the angle which is formed by its course at Shaikh Saad. It was hoped, further, that a successful advance on the right bank would subsequently enable the British to enfilade the enemy's positions on the left bank of the river, and so render them

untenable. After explaining his intentions to the commanders of brigades, Sir George issued orders that the British force was to advance on Shaikh Saad at 8-30 a. m. on the 6th January. On the right bank, under Major General G. V. Kemball, who had been transferred from the staff to an executive command, there would be the 28th Infantry Brigade, comprising the 2nd Leicestershires, 51st and 53rd Sikhs, and 56th Punjabi Rifles, one troop from the Cavalry Brigade, the 9th Field Artillery Brigade, consisting of the 19th, 20th and 28th Field Batteries and an ammunition column, half of the 13th Sappers and Miners, the 128th Pioneers (less one company) and three sections of Field Ambulances. The 6th Cavalry Brigade consisting of two sections of S. Battery Horse Artillery, the 14th Hussars, the 4th Cavalry, the 33rd Cavalry (less detachments at Kut-al-Amarah and Nasiriyah) and the Signal, Ammunition and Ambulance units, was to operate on the left of the 28th Infantry Brigade group. On the left bank there would be under Brigadier-General G. B. H. Rice, the 35th Infantry Brigade comprising the 1-5th Territorial Battalion of the Buffs 37th Dogras, 97th Infantry and 102nd Grenadiers; the 16th Cavalry (less one squadron), the 1-1 Sussex Territorial Field Battery, one company of the 128th Pioneers and two sections of Field Ambulances. One mile behind the fighting troops of this group, a reserve group would march under Lieutenant Colonel A. H. Dennys, consisting of the 19th Infantry Brigade, which included the 1st Seaforth Highlanders, 28th and 92nd Punjabis, and 125th Napier's Rifles; and the Heavy Artillery Brigade, in which were the 72nd and 77th Heavy Howitzer Batteries, and one section of the 104th Heavy Battery. The second line transport of the groups was to follow at a distance of two miles in rear of the last fighting unit on each bank of the river. General Younghusband himself would be in the river gunboat Gadfly, carrying one 4 inch gun and two Maxims, and would be accompanied by a sister ship the Crane fly; and on the river there would also be the Bridging Train, and the following small river steamers carrying baggage, stores, reserves of ammunition and supplies; the Blossie

Lynch, P.3., P.6., and the Julnar which was to be used as a hospital ship.

The total number of fighting officers and men on land amounted to about 13,000 with 36 guns and 52 machine guns ; and of the personnel about 10,000 were infantry, and 1450 cavalry, but of the latter only 1250 were with the Cavalry Brigade. The guns consisted of eight 5 inch howitzers, two 4 inch guns, eighteen 18 pounders, four 15 pounders and four 13 pounders.

Sir George Younghusband's instructions were not modified after the receipt of General Aylmer's message, since the commander of the first echelon considered that the intentions of his superior could best be fulfilled by containing the Turkish forces on the left bank and opening the way for decisive action against the weaker and isolated right wing of the enemy's army. General Younghusband proposed, then, to commit Sir Fenton Aylmer to a definite plan of action, whether it was a good or bad plan is immaterial whereas in the Corps Commander's telegram it was, as has been shown, definitely stated: "My orders are therefore that you hold the enemy to his position with sufficient vigour to make him show his hand until my arrival with the remainder of Corps".

General Younghusband had so disposed his force that, on the right bank of the Tigris, there were about 1250 cavalry, 4000 infantry, eighteen 18 pounders, four 13 pounders and 22 machine guns, while the troops on the left bank numbered 6000 infantry, 200 cavalry, eight 5 inch howitzers, two 4 inch guns, four 15 pounders, and 24 machine guns. When two equal and equally well armed forces meet in battle the art of tactics lies, as a rule, in measures to bring superior numbers, guns etc to bear on some portion of the enemys line and if possible, from two directions; and this generally involves steps to hold fast the remainder of his army with a relatively weak detachment. General Younghusband believed that weaker force of the enemy was on the right bank, and seems, therefore, to have considered hatt about half of the British group would be able effectively

to deal with this portion, while the rest would be required to keep off the larger part of the Turkish army. He had, moreover, definitely issued orders for the column to march to Shaikh Saad, and had explained to his subordinate leaders his intention of driving the enemy's right into the loop at Shaikh Saad and holding it there until defeated. As this was to be the decisive movement, it would probably have been well, therefore, to have incurred a larger hazard on his right; and it is suggested that he might have reduced materially the force which was to operate on the left bank in order to make more certain of achieving his purpose against the Turkish troops that were standing in front of Shaikh Saad. It was necessary to have troops on both banks so as to prevent the enemy from attacking the British shipping.

There was a good deal of firing into Younghusband's camp on the night of the 5/6th January, and on the morning of the 6th a dense fog came on which for some time prevented movement. The Cavalry Brigade had, however, ridden out at 8-30 a.m., and not long afterwards the 28th Brigade group also marched off covered by an advanced guard consisting of one troop of the 16th Cavalry, one section of Field Artillery, the 56th Rifles and one company of the 128th Pioneers. The main body of the groups was formed in two parallel columns, one moving along a track, the other being on its left. The first of these columns comprised the 9th Field Artillery Brigade (less one section), the 92nd Punjabis, who were sent across the river in the Blossie Lynch during the morning, one company of the 128th Pioneers, three sections of Field Ambulances and all the wheeled first line transport. The outer column was composed of half of the 13th Sappers and Miners, the machine guns of the 28th Infantry Brigade, the 2nd Leicesters, the 53rd Sikhs and the 51st Sikhs, less two companies which were with the second line transport.

On the left bank the 35th Brigade group had also moved forward at 8. 30 a.m. under the protection of an advanced guard composed of one troop of the 16th Cavalry, the 37th Dogras

and two companies of the 102nd, while the remainder of the 16th secured the outer flank of the column. For some time the advance was uneventful, but at 10 a.m. the mist cleared away, and an hour later reports came in of the presence of the enemy. Soon afterwards the leading companies of infantry sent word that trenches had been located about half a mile to their front and running northwards from the river.

Deployment now took place, the leading units were reinforced, and the 1/1st Sussex 15 pounder Battery unlimbered and fired a few rounds at two regiments of hostile cavalry which had appeared on the right. They proved, however, to be out of range, and were contained for the remainder of the day by the 16th Cavalry. No sooner had the attack of the infantry been launched than the troops found themselves under a heavy and accurate fire of shrapnel which caused considerable loss. Owing to the mirage, and to the fact that the whole area was covered with the low banks of disused irrigation channels and also by patches of scrub, it was almost impossible exactly to locate the Turkish defences, which were well sited. Nevertheless when the 102nd had come up on the right of the 37th, and the 97th had moved up to their support, some progress was made; for the 1/1st Sussex Battery was also now in action within 2500 yards of the enemy's position, the 77th Howitzer Battery had opened fire on its left, and the 72nd had unlimbered some 300 yards from the right of the Sussex guns. The infantry however, were definitely checked when, as they supposed, from 700 to 800 yards from the Turkish lines.

The advance along the right bank had, meanwhile, been carried on without incident for about 4 miles until the mist lifted; and now the Cavalry Brigade, which was moving over ground much intersected by dry watercourses, found itself in the presence of a number of Arabs, who were driven off by our machine guns. At about the same time the advanced guard of the 28th infantry Brigade group reported that the enemy's entrenchments had been observed by the scouts at a distance of two miles ahead, and that a mass of 1000 mounted men could be distinguished some three miles away to the

front in the mirage. On gaining the western end of the Mandaliyah reach half an hour later, the advanced guard halted, and the artillery fired a few rounds at some small parties of the enemy; and now the guns with the Cavalry Brigade also opened fire at a range of 3000 yards, and word was sent back that 500 enemy horsemen were manoeuvring round their left. Since these troops might attempt to raid our shipping, the Crane-fly, which was following the Gadfly, was sent down stream to act as escort to the river steamers.*

As soon as the main body of the 28th Brigade group had come up General Kemball took measures in accordance with the general tenor of his instructions. The advanced guard was ordered to move forward, to keep its right on the bank of the Tigris, to engage the enemy and to push home the attack as soon as the operation of the remainder had developed. The rest of the Brigade group was to advance against the enemy's position as previously located by the airmen, the troops marching in echelon from the right, the 53rd in front, then the Leicesters, next the two companies of the 51st and finally the 92nd and half of the 13th Sappers and Miners. The artillery were to be on the inner flank escorted by one company of the 128th. The Cavalry Brigade was to secure the left of the infantry, and was also to envelop the enemy's line and prevent the escape of his troops in a southwesterly direction out of the loop of the river.

General Kemball's troops were met as they advanced with both shell fire and heavy musketry, directed apparently on localities of which the ranges had previously been ascertained. As the attack made progress it became evident that the Turkish trenches extended a good deal further than had been reported, and both the Leicesters and 51st were obliged, at 1 p.m. to incline outwards so as to face the enemy's fire. The envelopment of the Turkish flank and an attack on their troops from two directions would, it was therefore apparent, be more difficult than had previously been supposed.

*The width of the Tigris is from 200 to 300 yards, the current is strong, and at this period, when the level of the water was many feet below that of the banks, navigation was impeded by sandspits and shallow stretches.

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Soon afterwards the cavalry Brigade, which was now nearly due south of and some four miles from Shaikh Saad, reported the presence of another series of trenches one and a half miles further from the river, and that an attempt would be made to outflank these. But a body of Turkish camelmén, which had issued from Shaikh Saad somewhat earlier, now prevented this manoeuvre by endeavouring to work round our left in conjunction with the Arabs, although both fell back whenever the Horse Artillery opened fire on them. In the end the commander of the Cavalry Brigade disposed the bulk of his men so as to contain the enemy's horsemen. He then directed one squadron of the 4th Cavalry to dismount and endeavour exactly to locate the enemy's trenches with the support of S. Battery which opened fire on them at a range of 2000 yards. Subsequently the Brigade again attempted to advance westwards, but being met by rifle fire from entrenchments and menaced on its left by the enemy's camelmén and horsemen, returned to its original position, where it was rejoined by the squadron that had dismounted.

At 3 p. m. the positions of the troops of the 28th Brigade group were as follows : the artillery were in action not far from the river, the 20th Battery supporting the 53rd and the 28th assisting the Leicesters. Owing to the fact that the 53rd had moved in a southwesterly direction, a gap had appeared between them and the 56th Rifles who were on the right ; the 51st were in line with the left of the 53rd and from 300 to 500 yards from the enemy's position ; then came the Leicesters, whose firing line was within 500 yards of the Turkish trenches, but their left was quite two miles from the Tigris. General Kemball had only the 92nd and half of the 13th Sappers and Miners in hand, and these he was holding under cover in a watercourse 1000 yards to the west of the bend of the Tigris at Hibsh.

At about 3.45 p. m.* Kemball had resolved to make a further attempt to outflank the enemy, and had directed the 92nd to move to the left of the line. Soon afterwards a message was

*The sun set at about 5-15 p.m.

received from Younghusband that the action was to be discontinued, that battle outposts were to be placed in position, and that the ships, which had been held back all day by the Turkish shells, but owing to the slackening of the enemy's gun fire, had at last been able to move forward, were to be closed under the steep banks of the Tigris.

General Kemball had also received a report from the Cavalry Brigade that there were still numbers of the enemy's horsemen on their left, but that it seemed as if the Turkish infantry were moving westwards. Before complying with Younghusband's orders Kemball, therefore, personally went forward to take stock of the situation; but, finding himself under heavy musketry from both front and flank, he came to the conclusion that there was no immediate prospect of victory. Orders were then issued to the troops to entrench where they stood, and after darkness had fallen, arrangements were to be made to send back the wounded, and also parties of men for the purpose of obtaining water and rations. The 92nd, who had moved forward, were to return to the water-course at once, the half of the 13th Sappers and Miners were to build a redoubt near its southern extremity, and as soon as it was dark all the artillery were to withdraw to Hibsh and remain there under escort of one company of the 92nd and one company of the 128th Pioneers. In notifying these arrangements to the headquarters of the first echelon, Kemball, however, gave it as his opinion that the enemy would probably fall back during the night.

Meanwhile General Rice had not pressed his attack, and had kept the 97th and 15th Buffs in hand. After nightfall the positions that had been reached were consolidated, arrangements were made to bring food, water and ammunition to the infantry; and the Gunners, after constructing gun-pits, withdrew to a bivouack at the western end of the Musandak reach, where the transport had been parked and the bulk of the 19th Infantry Brigade had remained in reserve.

The enemy had not attempted directly to attack the shipping during the day, but the Turks sent several floating mines down river some of which were sunk by fire, and none occasioned loss

or damage. One mine was also seen in the water when the head of General Aylmer's second echelon gained the eastern end of the Musandak reach at 5 p. m., but fortunately it did not explode.

Owing to a breakdown in the Signal service, which, as has been stated, was to a large extent improvised, Sir Fenton Aylmer did not receive any reports from General Younghusband during the action, and it was not until 9 p.m. that the following message came to hand : "As arranged advanced on both banks this morning after two hours delay by fog, found enemy in strength holding trenches as reported by aeroplane. Attacked on right bank, holding on left bank. Owing to short time available and inability of weak Cavalry Brigade to drive off large bodies of Turkish and Arab Cavalry my left was held up and unable to turn the enemy's right. Situation now as follows on right bank, 28th Brigade with 92nd and 9th Artillery Brigade attacking enemy's entrenchments ; cavalry withdrawn to river bank in rear. On left bank 35th Brigade, with Heavy Artillery Brigade facing entrenchments, 19th Brigade, less 92nd, in rear. Will continue battle at daybreak, would suggest 7th Lancers, Mountain and Howitzer Batteries and one infantry brigade reinforcing my left, other brigade on left bank. Am throwing bridge during night at junction of nullah, half mile east of Hibsh bend. Casualties not yet ascertained."

Somewhat later a reply to this message was sent from the Headquarters of the Tigris Corps stating that the troops of the second echelon would march at 8 a.m. to the bridge ; that the 7th Lancers, less one troop, would start at 7 a.m., (that is at about the time the sun rose), to rejoin the Cavalry Brigade ; that General Younghusband was to meet the Corps Commander on the left bank at the bridge at 7-30 a.m. ; and that the first echelon was not to undertake a serious attack until after he had arrived on the field. A full report as to the enemy's dispositions was also required.

Earlier in the evening Younghusband had approved of a proposal to transfer the 56th Rifles from the right to the left of the 28th Infantry Brigade, and that this battalion and the 92nd should then attack the enemy. But, at midnight, Kemball sent word

that reports from the firing line showed that the situation was somewhat different from what it had appeared to be in the afternoon. The enemy were in strongly built trenches, seemed to have ample ammunition and showed no signs of wavering, rather the reverse. The night was so dark that it had not been possible to communicate with the 56th; the idea of transferring this battalion from one flank to the other had, therefore, been abandoned, and units had been ordered to entrench where they stood. The artillery positions would be entrenched on the 7th, and Kemball would then rely on the guns and Cavalry Brigade to prevent the Turks from turning the left of the 28th Brigade. There was urgent need of more ammunition.

The Turks kept up a vigorous fire on Kemball's troops throughout the night of the 6-7th January, and, as a heavy thunderstorm also broke over the battlefield, the entrenchments were not excavated without a good deal of difficulty. However, during the night the ammunition was replenished; and, at 6.45 a. m. on the 7th, the Cavalry Brigade rode out to a position about one and a half miles to the south of their bivouacks, whence they could cover the left of Kemball's troops and also secure the safety of the transport of the group.

It appears that Kemball's latest report was not transmitted to the headquarters of the Tigris Corps; but, at about 1.30 a. m., a message was received from Younghusband to the effect that the Turks were in force on both banks of the Tigris, and that it was not possible to give an exact estimate of their strength.* Eight

* During the morning of the 6th a report had been made to the headquarters of the Tigris corps by an airman that there were no large enemy forces in the Sian positions. About 1800 men had been seen on the right bank of the Tigris to the south of Hannah, 1000 men were in movement on the left bank at Naasah, and on this bank at Shaikh Saad there was a camp holding 2000 men. There was also a camp on the right bank at Shaikh Saad. Two lines of trenches, the first one and a half miles long and having six gun pits behind it, were seen on the left bank and troops were observed to be in the second line. There were also trenches extending for one and a half miles from the river on the right bank, but neither gun pits nor troops were seen here.

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guns had been located, and a number of infantry had been seen to move out of Shaikh Saad at dusk. There were 2000 Turkish cavalry and 1500 Arabs on the right bank of the river.

Meanwhile General Aylmer had issued orders for the advance of the second echelon at 8 a.m. on the 7th. The 9th Infantry Brigade consisting of the 1-4th Hampshires, 107th. Pioneers, was, with one section of the 23rd Mountain Battery, to march up the right bank of the Tigris under Brigadier-General R. St. J. Harvey ; at the same time Brigadier-General C.E.de M. Norie was to advance up the left bank with a group comprising the 21st Infantry Brigade, which consisted of the 2nd Black Watch, the 6th Jat Light Infantry, the 9th Bhopal Infantry and the 41st Dogras ; one section of the 23rd Mountain Battery, and the 61st six gun 4-5 inch Howitzer Battery, which was expected to arrive from Basrah but did not take part in the battle. The 7th Lancers, (less one troop) one squadron and the machine gun section of which were on the right and the other squadron * on the left bank, were to rejoin the Cavalry Brigade. Certain mahailas carrying supplies were to be guarded by a Provisional Battalion, and the gunboats Butterfly and Dragonfly were to escort the river steamers and tugs Medjidieh, Malamir. P. 7., Shirin and T. 3.

At 6-30 a. m. on the 7th Younghusband reported that, owing to the rain, the¹ bridge would not be ready until 10 a. m ; and three-quarters of an hour later he met General Aylmer as arranged, and the latter then took over the command of the whole force.

The situation as explained by Sir George Younghusband disclosed to Sir Fenton Aylmer the fact that his subordinate had been deeply committed to battle, and that only part of the 19th Infantry Brigade and the Cavalry Brigade were still in hand. As regards the enemy, the information that had been received before the commencement of the action, combined with a report from an airman on the 6th, indicated that comparatively small numbers of Turks were on the right bank of the Tigris, although the positions of the whole of the enemy's entrenchments here had

* One squadron was in Kut-al-Amarah.

not been definitely located. General Aylmer would soon be able to use the bridge that was being constructed for the purpose of transferring troops from one side of the river to the other ; and although the bridge was within range of the Turkish artillery, which might interrupt or delay the passage of troops, he held, therefore, a great advantage over the enemy who did not possess the means of passing troops quickly across the Tigris*.

Probably the first requisite for the British was more information,† but, in the circumstances as they may then have appeared to General Aylmer, two alternatives, broadly speaking, were open to him. He could concentrate against the enemy's force on the right bank of the Tigris, which was comparatively weak ; or he could hold these troops to their trenches and make his principal effort against the larger numbers that were on the left bank. There is much to be said in favour of and against either course. If the British massed their men on the right bank of the Tigris a successful offensive against the Turkish detachment was practically assured, and the British might, in consequence, be able to render the inner lines of entrenchments on the left bank of the river untenable by the enemy's troops. This, however, was by no means certain unless the fire from the right bank could be directed and controlled from the left ; for the ground was so flat that even the small dykes that existed in localities where the Arabs had endeavoured to control the flood water would defile the enemy's lines. Further, such success as might be gained on the right bank would be over a small portion of the enemy's forces only, and the main body of Turkish army might, in the meanwhile, outflank the British forces that were retained on the left bank of the Tigris ; and if they gained the bank of the river, might, as had happened at Umm-al-Tumal, during Townshand's retreat to Kut-al-Amarah, then

* They would have to be transported on rafts or in small boats.

† From an intercepted enemy order it appeared that we were being opposed by the 35th 38th, and 51st divisions. According to reports of Arabs the Turkish Cavalry Brigade was on the right bank, and our cavalry had been engaged with camelmén and two battalions infantry.

destroy the shipping on which the British depended for their existence.

The concentration of British troops on the left bank of the Tigris would largely obviate this danger, and to the cavalry, with the whole or ever part of an infantry brigade and a few guns, the task of preventing the Turkish detachment which was on the right bank from interfering with the land or river transport could safely be left. Further, a decisive victory on the left bank would settle once and for all the question of the relief of Kut-al-Amarah, and Townshend would be able to harass effectively the enemy's beaten troops as they emerged from the defile between the Suwaikiyah marsh and the Tigris. Against this alternative there was, however, the fact that, as part of Aylmer's force was closely engaged on the left bank, the rest could not manœuvre freely, even within the limits prescribed by the waterless area and lack of transport, without exposing it to defeat in detail. The British, therefore, would perhaps be obliged directly to attack a numerous enemy holding a strongly entrenched position; and, if so, must fight under conditions when casualties could not fail to be serious and decisive success would be unlikely. No one arguing after the event can fairly decide which of the alternatives would have been most advantageous, unless he possesses an intimate acquaintance with all the factors involved, including the quality and *moral* of the respective forces, for this is and must always be decisive. It may, however, be observed that a rapid success gained on the right bank would probably have put a stop to any Turkish attempts to deliver a counter-attack; but, if the attainment of such success were unlikely, then it would be best to make the greater effort on the left bank of the river, and this is the plan which was adopted by General Aylmer.

Between 9 a.m. and 10 a.m. on the 7th, while Aylmer was considering these factors, both the 35th Brigade, and the 16th Cavalry who had again ridden northwards and were watching a body of the enemy's cavalry, reported that a Turkish force of a couple of battalions and four squadrons was moving round the British

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right. The 1st Sussex Battery had previously been firing on the enemy's trenches that were in front of the 35th Brigade, after ranging over yellow screens displayed so as to mark the positions of our infantry, and also on the enemy's reserves; but it now turned on the Turkish cavalry obliging them to retire, and the infantry battalions disappeared.

It seems possible that this demonstration caused General Aylmer to decide at once to prosecute the offensive, although the enemy's dispositions had as yet not definitely been ascertained on either bank of the river; and, at 10-15 a.m. orders were issued from the Headquarters of the Tigris Corps that another attack was to be made on the Turkish positions astride the Tigris. The following troops, *viz*, the 19th Infantry Brigade (less the 92nd Punjabis), the 21st Infantry Brigade, the 35th Infantry Brigade, the 9th Field Artillery Brigade (less the 28th Battery), the 1st Sussex Battery, the 16th Cavalry and two companies of the 128th Pioneers, were placed under General Younghusband for this purpose. He was also informed that the 19th and 21st Brigades were to be employed in turning the enemy's left flank, in conjunction with a frontal attack which was to be made on the trenches that stood on and near the left bank of the Tigris. At the same time General Kemball was to take command of the 28th Infantry Brigade, 92nd Punjabis, one company of the 128th Pioneers, the 28th Field Battery, and two sections of the 23rd Mountain Battery and, as soon as General Younghusband's troops were in position for the delivery of the turning attack, Kemball's force was to make a vigorous advance in coöperation with the Cavalry Brigade. The 9th Infantry Brigade and the Provisional Battalion would be in reserve on the right bank; and the 62nd Punjabis who had just come up, the 72nd and 77th Heavy Batteries, one section of the 104th Heavy Battery and the 13th Sappers and Miners would be under the orders of the Corps Commander on the left bank. Reports were to be sent to the northern end of the bridge.

On receipt of these instructions General Younghusband sent for his brigadiers and artillery commanders to whom the plan

of action was explained at 11 a.m. It was proposed that the attack should commence at noon, when the 19th Infantry Brigade (less the 92nd, and also two companies of the 28th which had been sent to the 35th Infantry Brigade) was to advance on the right of the 35th Infantry Brigade, and sweeping round was to roll up the enemy's left flank in cooperation with the 16th Cavalry working on the right. As progress was made by the 19th Brigade, the 35th would cooperate by delivering an attack during which its left was to rest on the bank of the Tigris. The artillery would support both attacks from positions about a mile to the north-west of the bridge, and the 21st Infantry Brigade would follow behind the centre of the group as the reserve.

The dispositions that had been indicated by General Younghusband may have been those best adapted to the situation, for, as has been pointed out, it does not appear that the positions of the enemy's trenches had been accurately located owing to the prevalence of haze and mirage and other causes; and the fact of coming under fire, and the direction from which it was delivered, were generally the first indications of the presence of the Turks. But the arrangements were hardly in accordance with either the letter or spirit of the orders that had been issued by General Aylmer. It was indeed afterwards found that the Turkish front line extended for more than three miles from the Tigris, and that this line was connected with other entrenchments, which had been constructed for the use of supports and reserves, by a number of well made communication trenches. A series of trenches thrown forward at some distance from the left of the first line so as to flank it had also been commenced; and, in addition, a third position had been prepared from three to five miles behind the Turkish left, where resistance could be offered to any British attempts at envelopment.

Owing to delay in passing over the bridge it was found that, the 19th and 20th Batteries would not be available at noon for the support of Younghusband's attack. General Aylmer, however, placed the 72nd Howitzer Battery at his disposal, and sent instructions that the attack was to proceed. Accordingly, at about

11.45 a. m. the 19th Brigade advanced in a north—westerly direction in two lines of columns with a distance of 500 yards between the lines. On the left were the 2nd Seaforth Highlanders, on the right the 125th, less one company which formed the brigade reserve. Then came one company of the 28th, the other was escorting transport, and the machine guns of the Brigade moved on the right of the second line. The 16th Cavalry were on the right of the 19th Infantry Brigade, but a section of this regiment was also detailed to guide the Seaforths on to the right flank of the 35th Brigade.

The units of the 19th Brigade did not at first meet with any opposition, but between 1.30 p. m. and 2 p.m. an officer of the improvised staff of the 7th Division rode up from Younghusband's Headquarters and pointed out that the Brigade had moved too far to the north, and that, in consequence, there was now a gap between the 19th and 35th Brigades. This must be filled up by the 21st Infantry Brigade, which, after advancing for some distance, had halted, at 1.20 p. m., so as to enable the 19th Brigade to move into position, and was about to cook dinners. The staff officer then gave instructions that the 19th Brigade was to turn to the left, march forward for about 1000 yards and then, after wheeling to its left, deliver an attack. The troops, therefore, proceeded in the new direction, and soon afterwards a body of Turks, who were engaged in excavating trenches, came suddenly in sight out of the haze on the right of the British and not more than from 1200 to 1500 yards away. Meanwhile orders had been issued to the Black Watch and 6th Jats of the 21st Brigade to fill in the interval between the 19th and 35th Brigades, and these units had moved rapidly forward in artillery formation to do so.

The Turks did not at once open fire, and some of the units of the 19th Infantry Brigade were given time in which to adopt extended order; but the leading companies, as well as those of the Black Watch and 6th Jats, then found themselves under heavy musketry from two sides, and also under shell fire from their right rear. As was only natural the British now faced in both directions, and further endeavoured, although without the assistance

of gun fire, to close with and evict the enemy by means of a rapid advance. The supports were soon absorbed in the fight, but the efforts of the troops were unavailing; and, at about 3 p.m. after suffering very serious losses, a body of men consisting of about half of the Seaforths and half of the 125th, who had rushed forward right into the eye of the sun, was brought to a standstill 250 yards from the left flank of the main Turkish position, their own left being in touch with the two companies of the 128th Pioneers. These had followed the Black Watch and the 6th Jats, who, after experiencing heavy casualties, had been checked at a distance of between 300 and 400 yards from the enemy. Half a mile away on the right another group of Seaforths, 125th and 28th was facing northwards and was about 300 yards from the enemy's flanking trenches. The men now began to make such cover as could be thrown up with their entrenching implements; but soon afterwards a force of Turks, probably the battalions which had been seen in the morning by the 35th Brigade and 16th Cavalry, accompanied by Arab horsemen, began to advance as if to envelop our right, which was being guarded by the 16th Cavalry. Colonel Dennys then put in his small reserve and the machine guns, and sent to the 21st Infantry Brigade for assistance. General Norie at once moved the 41st up behind the right of the 19th Brigade, and subsequently prolonged the line with the 9th Bhopals. With the assistance of the 77th Howitzer Battery which had been brought into action to support the left of the 21st Infantry Brigade, and of the 19th and 20th Field Batteries and 72nd Howitzer Battery which were now covering the 19th Brigade, the advance of the Turkish infantry was then checked at a distance of some 400 to 600 yards from our front, and the rest of the Turks were held to their trenches. At the same time the two guns of the 104th Heavy Battery, which were firing from a position near the bank of the Tigris, and the fire of the big gun of the Crane fly which sent a few rounds towards them, put an end to the advance of the Arab horsemen.

The presence of large numbers on and behind the enemy's left had also been reported at about 3 p.m. by an airman. This officer had seen three battalions in the open on the Turkish left

flank, a body of from 3000 to 4000 men was in occupation of a newly excavated trench lying at some distance, four or five miles, behind the left, and there were also from 2000 to 4000 Arabs in this area. The Turks, however, did not again attempt to make an attack, and as the British were unable to do so the battle then remained stationary in this quarter until dusk, when the 19th Brigade, which now had in line only 800 rifles, was able to reorganize and entrench on a frontage of about 1200 yards facing both west and north. The Black Watch and 6th Jats also dug in after withdrawing for a short distance; and the remainder of the 21st Brigade, which had not been so roughly handled, secured the position that they were holding, while ammunition was replenished, food and water were sent up to the units and the wounded were collected and brought in.

During the time when this action had been in progress the 1-1st Sussex Battery had been firing at the supposed position of the portions of the enemy's trenches that lay nearer the Tigris; but these subsequently were found to be further from the leading troops of the 35th Brigade than had been believed so that the fire was not effective. At about 3 p.m., however, the infantry of this brigade pushed forward, 97th being on the left, then came the 1-5th Buffs, and the 37th Dogras formed the right; the 102nd and two companies of the 28th were held in reserve. About 400 yards were gained, but the attack then came to a standstill under a very violent fire of rifles and machine guns; and although the two companies of the 28th were put into the fight on the left and the five of the Sussex battery was directed on to enemy's trenches, no further progress was made. At nightfall the troops of the 35th Brigade drew back for about 100 yards, and then entrenched in spite of the enemy's fire; and at about 10.30 p.m. the 102nd relieved the Buffs who became the brigade reserve.

It seems that the Turkish gunners, who had kept up a heavy fire all day on our artillery, were equally unsuccessful in locating the batteries, and the number of casualties among the personnel was in consequence small. At 5.30 p.m. (about 15 minutes after sunset) the whole of the British batteries on the left bank were

withdrawn for purposes of security to their bivouacks near the bridge, and this movement was completed without loss.

Some compensation for the grave situation which had developed on the left bank of the river had fortunately been found in a success that had been gained by the units under Kemball. While making his dispositions for attack, Kemball had carried out a thorough preparation for the advance with the guns that were at his disposal. At 1.30 p.m., when heavy firing was heard on the left bank, all was ready for the attack; and, keeping the 56th near the river, and a reserve consisting of the 92nd, one company of the 51st and the 13th Sappers and Miners, Kemball now gave orders for the rest to push on. The 53rd, three companies of the 51st and the Leicesters therefore moved forward from their trenches. The fire of the Turks was, however, so strong and accurate that, notwithstanding the bold rushes that were made by the men of the Leicestershire Regiment, the British had not been able to close with the enemy by 3 p.m. At this hour General Kemball directed the 92nd to push forward on the left of the Leicesters, and at 3.30 p.m. he committed the rest of his slender reserve to action on the left of the line. After very heavy fighting and mutual loss, the Turks were unable to resist the pressure of the British and, by 4 p.m., with the close cooperation of the 28th Field Battery which was in action only 1500 yards behind our leading troops, a first line of trenches was captured together with 2 mountain guns, 3 machine guns and between 500 and 600 prisoners.

The Turks, however, were not demoralised by this incident, and attempts to move forward again were met with so strong a fire from trenches both to the front and flank of our line of advance, that Kemball ordered his men to secure their positions and place battle outposts.

Meanwhile, after having, in the early morning, taken up positions so as to protect the transport, the Cavalry Brigade had marched south-westwards for some distance at about 9 a.m. While doing so the units came under the fire of the enemy's guns, and also observed enemy infantry and cavalry advancing from Shaikh Saad. During the morning a few rounds were fired by S. Battery.

at the Turkish trenches and camelmen; and, at about 1.30 p.m., when advancing on the left of Kembell's force, the cavalry regiments were met by rifle fire from the Turkish position and sustained a few casualties. Subsequently the Brigade rode further westwards to their old position about four miles to the south of Shaikh Saad, and here they were able to check the advance of certain of the enemy's reinforcements by means of gun fire. After some further skirmishing with the Arabs, who, as usual, hung round our flanks, the Brigade returned to the bridge at dusk.

In view of the reports that had come in as to the situation of the 19th and 21st Infantry Brigades, General Aylmer had moved the two battalions of the 9th Infantry Brigade at 2 p.m. across the bridge to the left bank of the Tigris; and subsequently the Brigade, to which the 62nd were joined, marched northwards for some distance in order to be in position to prolong the right of the 21st Brigade. Except that a few shells fell near them, the troops were not actually engaged, and at dusk they returned to the river. It has been pointed out that the airman who had flown over the field had brought the news of the presence of a mass of from 3000 to 4000 Turks at a distance of 4 or 5 miles behind the left of their position. This information, coupled with the efforts that had twice been made by the enemy to outflank the British right, and also a report that at dusk two bodies of men had been seen moving eastwards from the Turkish left, caused General Aylmer to take measures to meet an attempt by the enemy to sever his communications with Shaikh Saad. The 1-4th Territorial Battalion Hampshire Regiment and 62nd Punjabis, therefore, were sent, at 9-30 p.m., three miles down stream to entrench a position there, and only the 107th were left as guard to the transport.

At 4-30 a.m. on the 8th January, however, all three battalions of this Brigade (the 107th had now joined the other marched), with the 16th Cavalry and 72nd Heavy Battery, for 8 miles further down the bank of the river until within sight of Ali-al-Gharbi, and at daybreak two gunboats also patrolled in this reach. After halting for a couple of hours while the Cavalry searched for the Turks, the troops returned to the battlefield. The 1-4th Hampshires and

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the 107th then marched out and threw up a line of entrenchments at a distance of about three miles from the Tigris on the right of those of the 19th Infantry Brigade, while the Turks fired an occasional shell on our troops.

The remainder of the units on the left bank had passed the night in readjusting the line, in digging, in searching for wounded and in escorting carts which brought food, ammunition and hand grenades from the bivouack and returned there with the wounded. The Turks did nothing except maintain a desultory rifle fire, which, at times and especially at midnight and on our right, became violent.

Soon after daybreak General Aylmer, who appears to have believed that, besides artillery and mounted troops, there were 7500 Turkish infantry on the left and 4500 on the right bank of the Tigris, issued instructions that further attacks were not to be undertaken by the men under Younghusband, until the success of the 28th Brigade had so far been exploited as to enable the Turkish position to be taken in enfilade from the right bank. The day was hot, and, as usual there was a mirage which acted as a defective magnifying glass in both distorting and enlarging objects and movements. In the reconnaissance that was carried out by the airmen in the morning, three groups aggregating 6000 Turks were seen to be standing behind the lines of the enemy's entrenchments and to the north-west of Shaikh Saad, and 3000 men were noticed in the bend of the river to the west of this place.

The 16th Cavalry had meanwhile again taken up their task of observing the Turkish horsemen on the left bank, and most conflicting reports were received during the morning from these and other troops as to the movements of the enemy, who were said to be retiring, to be moving in force round our right, and not to be visible at all on our right. The two guns of the 104th Battery, the 77th Heavy Battery, the 1-1st Sussex and the 20th Field Batteries had also moved again in the morning into positions from which to support the troops on the left bank, but there was little gun fire during the day on either side. At about 3 p.m. an attack by a couple of battalions and a force of cavalry seemed about to

develop against the 21st Infantry Brigade. The attempt, however, was not made; and except for some effective shelling of the enemy at 4 30 p.m., when the mirage had cleared away, by the 72nd Battery, which was supporting the 19th Brigade, and a good deal of shooting by Turkish marksmen, who continually harassed our troops, there was no other fighting on the left bank of the Tigris.

In order to assist General Kemball in prosecuting his attack the 62nd Punjabis and the 19th Field Battery were sent to the right bank, and the Cavalry Brigade received instructions to work under his orders. During the morning Kemball again carried out a methodical fire preparation with the 19th and 28th Field Batteries and the four guns of the 23rd Mountain Battery, and these were also seconded by the guns of the war vessels. Soon after 8 a.m. it seemed as if the Turks were falling back. The Cavalry Brigade, therefore, were brought up along the right bank of the Tigris behind the line that was held by the infantry, but the horsemen were received with so violent a fire of shrapnel as to show that the hopes that had been entertained of the enemy's retirement were premature. To make assurance doubly sure one squadron of the 14th Hussars was, however, sent forward, but this was soon driven back by rifle fire from both banks of the river; and meanwhile Kemball had despatched the remainder of the Cavalry Brigade to its former position 4 miles to the south of Shaikh Saad, so as to secure the left flank of his infantry.

This locality was reached shortly before 10 a.m., and, leaving the advanced guard in position to secure their left, the Cavalry began, not long afterwards, to move towards some enemy trenches that had been located 3000 yards away and facing to the southeast and east. Although the Horse Artillery engaged these trenches at ranges of from 2300 to 2500 yards, the enemy were not shaken, and our horsemen were held back by effective rifle fire. At noon a body of mounted Arabs came forward as if desirous of closing with the advanced guard, but these were driven off by the fire of our guns and machine guns. Later on a Turkish reinforcement was seen to advance from Shaikh Saad, but this was out of range. The Cavalry, therefore, could do nothing more than remain in position

The Battle of Shaikh Saad.

until 2. 30 p.m., and they then withdrew followed, as usual, by the Arabs.

At about 11 a.m. General Kemball again reported that the Turks showed signs of weakening, and that he proposed to thrust forward the 62nd who had now come up, and also to carry out a personal reconnaissance. The 62nd accordingly moved past the 56th and advanced along the bank of the Tigris to within about 500 yards of what seemed to be the enemy's forward trenches. But behind these there was apparently another formidable position which seemed also to be held in strength. After having completed his reconnaissance Kemball reported that he was still of opinion that the enemy were withdrawing, although guns were being moved forward from Shaikh Saad and the British Cavalry had been checked. He added that, after having brought two batteries into position closely to support the infantry, it was hoped to deliver a successful attack in the afternoon. On the other hand he pointed out that it had been found to be quite impossible to locate the enemy's position on the left bank of the river.

The information contained in this message caused General Aylmer to consider the desirability of modifying his plans. At 1 p.m., therefore, an enquiry was addressed to Kemball as to whether the force at his disposal was sufficiently numerous to capture Shaikh Saad without incurring prohibitive loss, in view of the nature of the ground and the strength that had been disclosed by the enemy? He was also asked to give his opinion as to whether it would not be advantageous for the whole force to make a night attack on the Turks as soon as a plan for this purpose could be drawn up. Meanwhile he was to defer the delivery of the attack. An hour later Kemball reported that to make a night attack would be preferable, as the troops were in need both of food and rest. Although in an aerial reconnaissance which had been made at about 4 p.m. a distinct movement up stream of Turkish troops had been observed, the total strength of the enemy's forces was still estimated as being 9500 on the left and 5,500 on the right bank of the Tigris. Aylmer therefore decided to adopt the alternative of a night attack, and instructions were sent

both to Younghusband and Kemball accordingly.

At dusk the artillery on the left bank again withdrew to their bivouacks near the bridge. At 6 p.m. orders were sent to General Younghusband that the 35th Infantry Brigade was to become a reserve and to be placed near the bridge on the left bank of the river; the 19th and 21st Infantry Brigades were to reorganize, entrench and take over the whole front line on the left bank, the 21st being on the outer flank; the 128th Pioneers were to join the main body of the 9th Infantry Brigade, which, as has been stated, was now holding a position some 2 or 3 miles to the north of the Tigris, and were to assist these units to entrench it.

While the evacuation of wounded and the despatch of water and rations to the troops were in hand, the Seaforths and 125th of the 19th Brigade, therefore fell back at 8 p.m. for about 1000 yards and entrenched, and the 41st and the 9th Bhopals, of the 21st Brigade, then relieved the whole of the units of the 19th Brigade. Owing to the proximity of the enemy it was 1 a.m. before the latter Brigade, which was to replace the 35th Brigade, had been concentrated. The night was now very dark and cold, there was a strong wind and rain began to fall. As a result the guides lost their way, the men became exhausted with marching and countermarching through clinging mud; the relief of the 35th Brigade did not take place during the night, and in the end it was not moved to the bridge until after daybreak on the 9th.

The reports of patrols sent out in the early morning of the 9th, when the rain had turned into a drizzle, were to the effect that the Turks were still in position. The mud now rendered all movement slow, the drizzling rain caused observation to be more difficult than ever, but, at 10 a.m., the 16th Cavalry reported, from a position 3 miles to the north of Shaikh Saad, that there were no Turks to be seen, and that many of the trenches were certainly unoccupied.

Meanwhile the Cavalry Brigade, which had moved out at 7-30 a.m. as escort to a couple of staff officers who were to reconnoitre the ground to be passed over during the night attack, found that the Turkish trenches on the right bank were empty. A few

The Battle of Shaikh Saād.

wounded men were seen limping painfully away from Shaikh Saad, and, on the left bank, many cavalry were observed to be marching westwards. Feeling their way cautiously forwards the Cavalry Brigade gained a position at noon about 3 miles to the south of the bend of the Tigris at Shaikh Saad; and subsequently, under orders from General Aylmer, an advance was made to the neighbourhood of Naasah, which was found to be clear of enemy.

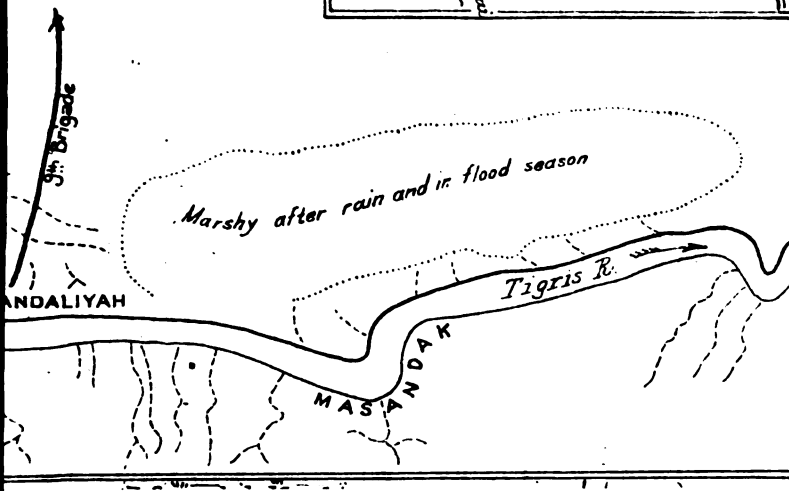
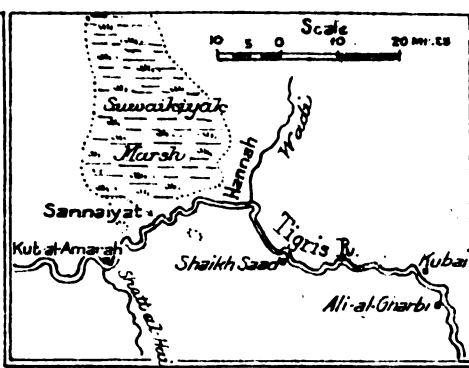
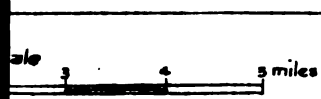
The reports that had come in up to about 11-30 a.m. had convinced General Aylmer that the enemy had indeed retired, and had moved apparently to Hannah and the Sannaiyat defile. A request was then made that the gunboats Crane-fly, Gadfly and Dragonfly should take up the pursuit; General Kemball was ordered to advance forthwith; and General Younghusband was directed to be prepared to move forward and cooperate with General Kemball. At the same time instructions were sent that the 9th Infantry Brigade, together with the 77th Heavy Battery and one section of the 104th Heavy Battery, the 128th Pioneers (less one company) and the 13th Sappers and Miners, and some men of the Provisional Battalion were to remain behind, clear the battlefield, and protect the ambulances, supply column and shipping.

These orders had to some extent been anticipated, and, at about 2-30 p.m., Kemball had occupied Shaikh Saad without encountering any opposition, and the 35th and 21st Infantry Brigades were on the left bank opposite to this place. The 19th Infantry Brigade was employed in escorting first and second line transport which left the Musandak reach at 2 p.m. In spite of a strong wind and of the glue-like mud that had resulted from the rain, and also of numberless trenches and irrigation channels that had to be crossed, the transport had for the most part been brought in by 10 p.m.; but the rear guard did not reach camp until about 2 a.m. on the 10th January. On the next day the staff of the 7th Division at last arrived from France, and took over from the improvised staff that had heretofore been working under General Younghusband.

The cause of the enemy's retirement from Shaikh Saad is not manifest, for the Turkish, who fought more stubbornly than had been the case in any of the battles up to that of Ctesiphon, had not had by any means the worst of the action. Possibly, however, reports as to the imminence of bad weather, which would increase the difficulty, that must already have been serious, of maintaining the force at such a distance from its depots above Kut-al-Amarah, may have induced the Turks to abandon Shaikh Saad. On the other hand the 4000 casualties that had been suffered by the 18,500 or 19,000 British fighting men that were present in this battle were a most serious loss, having regard to the limiting factor of the time that was believed to be available for the fulfilment of General Aylmer's task of relieving Kut-al-Amarah. Further, lack of medical personnel and equipment, and of river transport, had involved, as was pointed out by General Aylmer in a message which he addressed to General Headquarters, considerable hardship to the wounded and also grave difficulties in evacuating them; and this, again, could not fail to react unfavourably on the *moral* of the men.

Battle is perhaps the most severe test of human capacity, and since human beings are very liable to error even in the most favourable circumstances, it would be strange indeed if mistakes did not occur in the turmoil of a great contest. Many things contributed to increase the difficulties of the British in this action, and among these were the peculiar local conditions existing in Mesopotamia, the general absence of water at any distance from the Tigris, the flat, open and featureless ground, the presence of disused irrigation channels which rendered the concealment of trenches easy; the patches of scrub, the constant haze that caused even near objects to be dimly distinguishable, and the misleading effects of the mirage on the appearance of persons, animals and material. But greater even than these were the troubles arising from lack of proper equipment for the service of intercommunication, and also of transport for the relieving force, and from the absence of cohesion among its components.

Orders and instructions are always liable to misinterpretation, since speech and writing are but imperfect methods of conveying wishes and intentions. When commanders and subordinate are well known to one-another this disability is modified by the intimate acquaintance that is naturally possessed of characteristics and of methods of thought and procedure. Other wise such errors as those that took place in the battle of Shaikh Saad can hardly fail to occur. Even allowing for the unusual difficulties of the situation, and for the weaknesses inevitable in an improvised organization, it does, however, seem that the very deficiencies should have caused more circumspection to have been displayed in the operations, and that the heavy casualties might to some extent have been avoided. Perhaps too much reliance was placed on the reports of airmen, who also were working under novel and very difficult conditions, and too little allowance was made for the enemy's power of rapid entrenchment in an easy soil. Whatever may have been the reason the British leaders on both banks of the Tigris found themselves faced by trenches of whose existence they were not fully aware, and on the left bank the troops were outflanked instead of outflanking.



A MINISTRY OF DEFENCE ?

ALMOST every English newspaper and periodical published today contains some reference to that much discussed topic a Ministry of Defence. Should we have a Ministry of Defence to co-ordinate our fighting Services in place of the three separate Ministries we now have at the head of our Army, Navy and Air Force? Without doubt something of the sort is essential at the present juncture, when the efficiency of our three fighting Services has never assumed more vital importance and the money needed to secure that efficiency has never been so hard to find.

The Great War, which might have been expected to prove conclusively the relative value of big ships and little ships, airships and submarines, infantry and cavalry, has in most of these cases only created greater uncertainty as to which will give the tax-payer the best value for his money, and as to which are essentials and which are luxuries for the defence of our Empire.

The head of each of our fighting Services naturally strives for the efficiency of that Service for which he is responsible, and without doubt the ideal would be for us to bring each one of these Services to the highest possible pitch of efficiency. We are, however, faced with the certainty of national bankruptcy should we pursue this course, and we are forced to cut our coat according to our cloth. In other words we are compelled to spend our money on the upkeep of those arms which are vital to our national existence, at the expense of other arms and branches of the Services which, however useful and desirable they may be, yet lack that vital quality.

The difficulty now arises of deciding on which arms of the services our national security most depends. Before the Great War this difficulty seldom, if ever, presented itself; being an island

race we have naturally all through our history looked on the Navy as the first and greatest line of defence. We are now told that the next great War will be decided in a few weeks by flights of bombing aeroplanes, and that unless we can find a counter to these, Great Britain will, for purposes of defence, be an island no longer.

One expert tells us that the big ship is a thing of the past, being entirely at the mercy of bombing machines from the air ; another contradicts this statement and considers that the big ship is more important now than it ever was.

What is our present procedure for deciding which course we are going to take and where we are going to spend our money ?

The head of each fighting service lays his requirements before the minister who represents that service in the Cabinet. The latter explains his case in the House of Commons and asks for money to put it into effect. Perhaps he wants to build a new battleship at enormous cost. He is questioned. Can he say that this battleship is more essential than 100 aeroplanes asked for by the Air Minister ? No, he is not responsible for the Air Ministry, for he is only concerned with providing for the Navy what the Navy requires.

Then follows a long discussion in the House, followed by a still longer discussion in the Press, in some cases by people who know little or nothing of the subject. Experiments are carried out, meetings of the Committee of Imperial Defence are held, and the relative value of the battleship and the aeroplane is thrashed out. Innumerable people give their opinions, and a decision may be reached after long delay and much waste of time.

Hence the need for a Minister of Defence who can say : "It is very necessary that the Navy should have two new battleships, and it is essential that we should have 100 more aeroplanes. I should like money for both, but if that is impossible give me the aeroplanes,"

The present position of our Services may be compared to an army with no commander, each branch of which has to state its case to a committee of civilians.

"G" Branch asks for 1000 more men.

"Q" Branch asks for 500 more mosquito nets.

"A" Branch asks for 10 more doctors.

The Committee after much discussion might decide to sanction the 1000 men and the 10 doctors; whereas the Commander might, before putting up the case at all, have equalised the men and the mosquito nets and thereby saved half the doctors!

The establishment of a Ministry of Defence certainly appears to be the first step we must take to combine the greatest economy with the greatest efficiency in our fighting Forces.

This, however, is only the first step, whereas the second is even more important.

First let us consider what the composition of our Ministry of Defence will be. It will probably consist of the Minister and a Secretary for each of the three Services. None of these ministers will be in any way permanent, they will change with every change of Government, and will in all probability take over their duties knowing nothing of the particular Service which they are going to represent. They may take rides in a tank or trips in an aeroplane, but this will not teach them very much. Is it fair on these men, though they may perhaps possess brains and ability far above the average, that they should have to decide problems vital to our national defence, the solving of which are difficult enough to the expert who has given his whole life to their study?

True they will have the services of experts to advise them, but experts on the separate arms who will have implicit belief in the preeminent value of their own arm, and the expert who is most convincing and can best state the importance of the development of his own arm is the one who will probably carry most weight with the Minister of Defence.

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A Ministry of Defence.

Therefore the second great requirement is a National Defence Staff to work under the Minister of Defence and to co-ordinate the opinion of the experts.

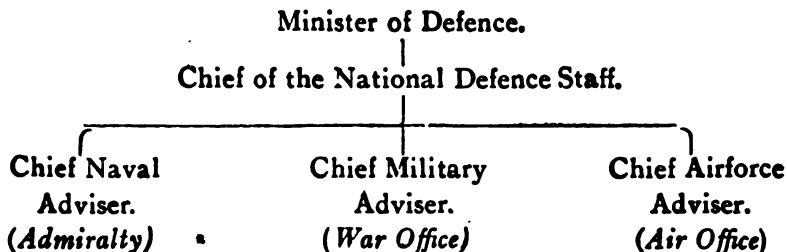
The Chief of the National Defence Staff, whether soldier, sailor or airman, will be a man who has studied the art of war from his youth up, who has read "the campaigns of the great masters" and realised the importance of the co-operation of all arms and all Services. If a soldier he will have probably studied with sailors and airmen at the Staff College, and will have been attached to both the other arms at some time during his career and learned their working and their needs.

Such a man will surely be able to put his finger on the essentials more certainly and more quickly than a civilian who approaches these matters for the first time. Above all he will be a permanency for his term of office, which he will take up with a good general knowledge of the capabilities of the three fighting Services.

It may be argued that such a man would be liable to give prominence to the Service to which he has belonged; even if he did he would still be subject to the control of the Minister of Defence, and the latter again to the Cabinet and the House of Parliament.

Moreover, by a national process of alternation between the Services, there would be every prospect of ensuring an equable balance in the long run.

Our National Defence Ministry and Staff would then be organised very roughly as follows:—



The Chief Advisers for the Services would have their own staffs and would put up the requirements of their own Service before the Chief of the National Defence Staff, who, after careful consideration would be able to advise the Minister of Defence as to the priority which should be given to these requirements, and which of them were vital to the National security.

With such an organisation could we ever have another Gallipoli? We should at least be certain that every problem that arose would be considered, not from the aspect of one Service alone, but from the view-point of the defence of the Nation as a whole, and this is the only way that we shall remain a first-class fighting power in this time of financial difficulty.

AMERICA AND JAPAN.

EXTRACTS FROM 7 ARTICLES IN THE "GOLOS RODINI"
OF VLADIVOSTOK,

BY

*General Androski, late Commandant of the Russian Staff College,
translated by Captain E.S.M. Prinsep.*

(EDITORIAL NOTE). These articles were written while the Washington Conference was still sitting.

IN a previous article, which dealt with deductions from the mobilization experience of the American Army in 1917 to 1918, it was shewn that, with regard to the preparedness of America for an offensive war in large numbers overseas :

(a) During the first 3 months after the declaration of war the United States must be content to mobilize quickly their regular army (up to 250,000 men) and their territorial army (up to 300,000 men), making a total of up to half a million men. The armed strength must remain for the most part (up to 400,000 men) on the American continent, so as to safeguard the country from any kind of expected attempt at invasion along the American seaboard. About 100,000 men will be disposed partly on the Hawaiian Islands, which must be kept by America whatever happens, as an intermediate base on the road to the coast of Eastern Asia : and on the Phillipines where, during the first 3 or 4 months of the war, offensive operations of a decisive nature by Japan for the possession of these Islands, and for the destruction of any kind of American base for operations along the coast of Asia, must be expected.

(b) The American National Army, mobilized on the principles of the 1917-1918 mobilization must, then, reckon with America's loss of the Phillipines, before they can possibly begin

their transit from America to the West across the Pacific. Therefore the operations of the American National Army at the shores of Asia will most probably begin with the recapture of the Philippines. This operation can only be successful when the American fleet, alone or in alliance with the fleet of another power, will have superiority over the Japanese Fleet, and when it will be possible to carry on uninterrupted transport of the mass of the American National Army across the ocean.

At the present time, and for more than a month already, the consideration of the question of the naval strength of the Powers interested in the hegemony in the Pacific has been taking place. On the decision of this question will depend the possibility of America dominating the Pacific and consequently of transporting her army of a million men to the Asiatic shore, or else her relinquishment of domination in the western part of the ocean to the Japanese fleet, which entails the relinquishment of all prospects of carrying on an offensive oversea war.

As far as one can conclude from the news which has reached us on the question, America is insisting that the relation of the Fleets be :—5-5-3 (America, England, Japan)—*i.e.* that the American Fleet, even by itself, will predominate over the fleet of her rival Japan, and in liaison with England, would have more than thrice superiority over the Japanese Fleet. In order to have the possibility of realizing these proportions, it is necessary to do away with the Anglo-Japanese Alliance because, from the other point of view, Japan in alliance with England, would have superiority over America and the latter would have to give up all idea of a possible offensive war across the Pacific, on the Asiatic Coast.

Japan insists that her fleet should consist of 60% or even 70% of the combined fleets of England and America. Then alone she would be stronger than the American fleet but would give way to the combined strengths of America and England. It is clear that for Japan, the continuance of the Anglo-Japanese Alliance is necessary, guaranteeing her superiority over the Americans practically twice over.

America proposed to stop building warships for 10 years after fixing the above mentioned ratio of fleet strengths at 5-5-3. This guarantees her superiority over the Japanese Fleet. Commissions of naval specialists contemplated the project from all angles and perceived one most important fact with regard to it, which clearly shews up the desires of America: *i.e.* that if Hughes' project is realised, then in 10 years time England will be able to build 12 dreadnoughts and her naval strength will be the greatest in the world, but that in yet another 6 years, *i.e.* after 16 years from the present time, America will have the strongest fleet in the world.

To sum up: instead of the Anglo-Japanese Alliance, profitable to Japan, it has been decided in principle to set up in the Pacific an alliance of four: America-Japan-England-France.

To whom is this profitable?—to America of course, and not to Japan. By this means, America breaks up the Anglo-Japanese Alliance, which was unprofitable to her since her fleet was dominated by the united fleets of that combine.

So, for already more than a month at Washington, a serious struggle, both wordy and on paper, has been going on. Its ultimate object is undoubtedly neither the limitation of armaments nor disarmament, but preparation for domination of the Pacific by that power which is able to carry through a political grouping of the powers interested in that ocean which shall be profitable to herself. If America succeeds in accomplishing the destruction of the Anglo-Japanese Alliance and the creation of the Four Power Alliance, she will by this means delay the beginning of her armed struggle with Japan, and having gained the so much needed time of peace, in 16 years she will have the strongest fleet in the world. Then, in alliance with England, interested in guarding her economic influence in the Indian, Australian and Indo-Chinese markets, she will easily divide up the spheres of economical influence in the Western Pacific. She will take to herself China, with its illimitable resources in this connection, and the commercially and industrially destroyed Siberia and Russian Far East. She will leave England her present markets. Japan will be naturally smothered by such a combination, perhaps irretrievably.

In the following article the probable "mise en scene" at the shores of Eastern Asia, in the case of war between America and Japan, of military operations during the first 3 or 4 months, before the mobilization of the American National Army is finished, will be gone into.

During these months Japan will undoubtedly have the advantages in the struggle to possess the Phillipines and to squeeze out the Americans from the shores of Asia.

2. During the first 3 or 4 months after the declaration of war, America would not be able to oppose Japan in the Phillipine Islands with more than 30,000 men, already stationed there, and reinforcements of 30,000 men (2 Divisions), who could presumably be despatched from the strength of the American Regular Army, that is, altogether, a total of 60,000 men.

Further reinforcements could be thrown across after the mobilization of the first series of Divisions of the American National Army had been finished, i.e. 3 months after the beginning of war.

Let us now take a glance at what might happen, during this period, in the region of the probable opening encounters between America and Japan, at the shores of Eastern Asia (The Phillipines and Formosa).

In order to throw light on the subject it is necessary to review the Japanese Army Organisation and the conditions for its mobilization.

According to peace time organisation, the highest military unit of the Japanese Army is the Division, in to the composition of which enter all branches of the service. There are no Army Corps in Japan.

At the present they have 1 Guard and 20 Line Divisions (among which 2 were lately formed for Korea). The total therefore is 21 Divisions. According to the plan for further formations which was already known in 1912, it was proposed to increase the total number of Divisions up to 25.

Each of these Divisions of the Regular Army, on the declaration of mobilization, will form 1 Reserve Division of the same composition as itself, consequently, in wartime, the number of Japanese Divisions will be doubled.

The composition of a mobilized Division :—

- 2 Brigades of Infantry of 2 Regiments of 3 Battalions.
 - 1 Cavalry Regiment of 3 Squadrons.
 - 1 Artillery Regiment of 6 Batteries of 6 guns (36 guns).
 - 1 Division of Heavy Field Artillery of 3 Batteries of 4 guns (not always included).
 - 1 Engineer Battalion.
- Auxiliary Detachments of various kinds.

Numbers of a Division :—

About 12,000 bayonets.

450 sabres.

36 light guns

and not always 12 heavy guns.

Besides this, there are detachments which are not included in the composition of a Division :—

- 4 Independent Cavalry Brigades (each having 2 four Squadron Regiments and 1 Battery of Horse Artillery).
 - 3 Independent Artillery Brigades.
 - 3 Regiments Mountain Artillery.
 - 12 Regiments Heavy Artillery.
- Aeronautical Battalion and others.

Total numbers of the Japanese Army at War strength :—

With 21 Field and 21 Reserve Divisions :—

about 500,000 bayonets.

up to 17,000 sabres.

up to 1,400 field, mountain and horse guns.

up to 300 heavy guns.

about 1,000 siege guns.

If the number of Field Divisions be increased to 25, then with 25 Reserve Divisions, the total fighting strength of the Army in war-time will reach 600,000 bayonets.

The Japanese Army is altogether up to date, considering the strength of its armed forces, their strong discipline and love of Fatherland. Its fighting qualities are of the highest. The leadership for military operations is in experienced and capable hands. In the Russo Japanese War of 1904-5, the Japanese began military operations having an army of 320,000 soldiers and towards the end of the war she had 640,000 under arms. In relation to these numbers the present Army of Japan can start the war with 500,000-600,000 bayonets, and, during the war, by means of new formations, and by means of the enormous quantity of trained men, contained in reserve, (in the territorial army and in the first levy) can develop into at least a million bayonets.

Besides that there is a reserve of untrained men who are, however, capable of carrying arms: in the recruit reserve—about 1,400,000 men and in the second levy about 3,000,000 men, in all, suitable for instruction—about 4,400,000 men, who, at the declaration of war, will have to be taken in hand in order to prepare reinforcements to replace casualties among the fighting forces.

In consequence of her Island position, Japan has no need to station her armies in peace time at such places as would be necessary for the defence of the country, since the probability of an attack from outside hardly exists, at any rate in the first long period of a war.

In the following paragraphs will be treated the mobilization conditions of the Japanese Army and the transport of its detachments to the regions where the first shock between Japan and America will probably take place:—Formosa and the Phillipines—as being the place of collision between their advanced guards;—Korea—as being the place where a rising of the people must be reckoned with in the case of Japan waging an exterior war. In Korea, too, sooner or later, the enemy's blow must be directed, in order to deprive Japan of her supporting base on the mainland; so as to drive her back on to the Islands where she can be blockaded.

3. By the 15th day of mobilization, Japan will have completely finished the mobilization of all her field divisions, *i.e.* 21 to 25 Divisions or about 250,000 to 300,000 bayonets, of which 2 Divisions will be in Korea, 1 in southern Manchuria, and 1 on the Island of Formosa, and the remaining 18 to 21 Divisions on the Islands of Old Japan.

Regarding the length of time for mobilizing reserve Divisions there is no exact information. In the Russo-Japanese War of 1904-5, the reserve detachments were formed more than a month after the beginning of military operations, *s. e.* mobilization of reserve divisions, to-day, might finish at the worst 2 weeks later than that of the field (1st line) Divisions.

Thus, within a month of mobilization orders, Japan will have under arms the whole mass of 500,000-600,000 bayonets. At one and the same time, with the reinforcement of the Army, begins the preparation of newly completed reserve detachments, to which will be called the untrained men from the popular reserve forces of those fit to carry arms, recruit reserve and second levy, which number up to 4,400,000 men.

As stated before, during the first 3 or 4 months of war, Japan will try to conquer the Phillipine Islands, where America will not have more than 60,000 men at a maximum and probably not more than 30,000.

Japan on the Island of Formosa will have at a maximum from 10,000 men, at the declaration of war to 12,000 men, on completion of the mobilization of the Formosa Divisions.

But if this Division shall form its own reserve Division, then after one month of war there will be 2 Divisions on Formosa (about 25,000 men).

With such a strength it is of course useless to dream of conquering the Phillipines. With these it is only possible to hold Formosa itself.

In order to begin operations for conquering the Phillipines, Japan must first of all transport several mobilized Divisions to Formosa from the Metropolis. In this connection the time for

assembling the necessary number of transports in Japan at the embarking places, plays a very important part.

The Japanese Field Regulations 1907 laid down that, in the transport of an army overseas, observing the greatest economy of space at embarkation, 3 tons of water displacement must be allowed per man, and nine tons per horse. Guns and vehicles are mixed in the holds. Calculating on these figures, the transport of 1 mobilized division with its transport demands 100,000 tons of water displacement.

Taking into consideration ships with a water displacement of over 1,000 tons, by the end of mobilization of the first line (field) divisions, that is, by the 14th day, up to 600,000 tons can presumably be collected at the present time. This is sufficient for embarking 6 mobilized divisions. These 6 Divisions can be despatched for operations on Formosa, for the conquest of the Philippine Islands. In their wake can be despatched, as a necessity arises, more reinforcements. It is clear therefore that in the first 3 or 4 months of war, *i.e.* whilst the divisions of the first series of the National American Army are being mobilized, the question of the Philippine Islands is already solved in favour of Japan, and America must start her operations by recapturing the Philippines, which is only possible in the event of the American Fleet, by some means or other, gaining superiority in the western waters of the Pacific.

Delay in the capture of the Philippines can only be realised if they are solidly fortified, which up to date has not been done by the Americans. Preparation too, of the intermediate naval bases, the Hawaiian Islands and the Island of Guam, is complete. It is only by operating on these that the American fleet can securely carry out the transport of a Million American soldiers across the Pacific from America to the shores of Eastern Asia.

All the above goes to prove that for the time being it is unprofitable for America to begin war with Japan. America must gain time. This is most apparent to-day and is being carried out by the breaking up of the Anglo-Japanese Alliance, which was

dangerous to America, and by concluding the Four Power Treaty between America, Japan, England and France, which is the result of months of labour by the American diplomats at the Washington Conference.

4. Japan's island position, giving her security against the possibility of a surprise invasion being carried out by an enemy's army, has, at the same time, a big drawback as regards carrying on warfare. If Japan be confined to these islands, she could be subjected to a naval blockade and be forced to conclude an unprofitable peace.

That is the reason, as has already been pointed out, that Japan, having embarked on politics as a great power and wishing to insure herself against blockade in case of war, began to strain with all her might towards standing firmly on the Asiatic mainland, and towards turning the Japanese Sea into an inland Sea for Japan. These efforts received realisation after she had united Korea to herself and created a Governor Generalship in that country. To-day further steps in the same direction continue to be observed and realised in the case of the very solid occupation of Sakhalien and the Primorian Oblast : both flanks of which, Vladivostok on the south and the mouth of the Amur River and De Castries Bay on the north, are already surely occupied by Japanese forces,

It was undoubtedly with the same aspirations that an energetic movement towards gaining a foothold on the Asiatic shore on the south was begun by Japan, since her dispositions on the islands alone do not guarantee her safety in case of a clash with an enemy who has a naval strength which might be able to blockade those islands.

Possessing herself of the island of Formosa, Japan received a strategical advance position of the greatest importance. It stands like a policeman at the very shores of Southern China and regards the Americans in the Phillipines and in the South China Sea with eagle eye. However, the isolated position of the island of Formosa separated as it is from the islands of Old Japan and their nearest

base, Sasebo, by 1,200 to 1,400 versts, cannot be considered as a safe or stable one in case of war and in view of aims at further extension to the south.

As on the north for the islands of Old Japan, so now for the island of Formosa, it is undoubtedly most important for Japan to have a firm footing on the Asiatic mainland near Formosa, in order to feel herself absolutely secure in case of any political or military complications.

Until this is done Japan cannot consider herself ready for a clash with America in this advanced guard region.

On the other hand as regards America, we have already stated that she is not ready to day for a struggle with Japan. Her unpreparedness shews itself both in the lack of security for her large scale invasion operations, which it would be necessary to carry out in order that the National Army of a million be thrown across the Pacific to the shores of Eastern Asia, and equally as regards the unfinished armament of those groups of islands in the Pacific which act as stepping stone stages, supporting the American Fleet in its transit of the vast distance across that ocean, namely: on the Sandwich Islands (Hawaii), on the Phillipine Islands, and on the Island of Guam. In this respect, on account of the Phillipine Islands, America is making the same effort for a base on the Asiatic mainland as Japan is making on account of Formosa.

It is natural that both countries wish to put off the conflict in order to perfect their military and naval positions in the ocean and on the shores of Eastern Asia. It is important to guard against all attempts on those islands which they have already in their possessions and which give: to America, a network of basic points upon which the transport of American strength to the Asiatic shore depends: and to Japan, security for her advanced strategical positions at these shores.

The efforts of both probable antagonists to get a base on the Asiatic mainland near the Islands which they have already seized, as is evident from a glance at their geographical position, can be

realised for America as for Japan by the seizure of a part of the French possessions in Indo-China. In this respect it is for Japan important first of all to take from China the Fukien Province, situated opposite Formosa : since from this province lead the roads to Indo-China, and its possession would give security to the Japanese in Formosa.

That such a yearning exists in Japan, though as yet not realised, on account of a whole host of reasons of a worldly character, is proved by the secret report of the late Viceroy of Formosa, Lieut. General Baron Kodama, written as early as 1902, and addressed to General Count Katsura, President of the Council of Ministers.

Thus in questions of hegemony in the Pacific and in the efforts of America and Japan to improve their positions on the shores of Eastern Asia, the interests of yet a third power France are dragged in.

England, too, mistress of the seas, has for a long time had undivided control of the Pacific markets. She cannot stand by unmoved in the face of these questions and in the face of the cutting of the Panama Canal. The latter has all the advantages of the shortest and cheapest sea routes over the Suez Canal, which England possessed and fully controlled. Her interests in the Pacific Ocean are immense as long as the very rich colonies of Canada and Australia on the borders of the Pacific Ocean, and India and Burma in close proximity to them in the Indian Ocean, belong to her. One can understand that England must enter into every agreement which concerns questions of the Pacific.

To-day these four interested powers, America, Japan, France and England, have concluded at Washington the Four Power Agreement, the contents of which lead to the keeping of the present position in the Islands and on the shores of the Pacific Ocean for the period of 10 years.

This diplomatic act is most profitable for America whose unpreparedness in a struggle for hegemony in the Western Pacific is the greatest of all these four powers. In the following paragraphs

the contents of the secret reports of General Baron Kodama, shewing the efforts of Japan to affirm herself on the shores of Indo-China, will be looked into in more detail.

5. In order to be real master to all the approaches from the Pacific Ocean to the shores of Eastern Asia, Japan must occupy the same dominating position in the South China Sea as she occupies to-day in the Japanese and Eastern China Seas. In order to attain this object, Japan must get a firm footing on the shores of Indo-China, by fighting France.

Opinion that this struggle was necessary and unavoidable took root in Japan a long time ago. At that time arose projects for the conquest of the French possessions in Indo-China. In order to understand the characteristics and seriousness of these projects, let us take and examine those of the late Viceroy of Formosa, Lieutenant-General Baron Kodama, as set out in his secret report written in 1902 and addressed to General Count Katsura, President of the Japanese Cabinet.

A translation of this secret report appeared in January, 1905, in the French newspaper "*L'echo de Paris*".

The first part of this report was devoted to proving that Japan must fight Russia first of all and not France, and the second part outlined a plan of campaign against France for 1910.

That report shewed with what accurate mathematical judgement the Japanese worked when reckoning their chances of success in a struggle with an enemy and what sound political opinions they hold.

Not long before the war of 1904-05, General Kodama was appointed to the General Staff, in order, it is said, to examine the plan of campaign against Russia. During that war he was Chief of Staff of the Japanese armies; and at its conclusion was appointed Chief of the Japanese General Staff, in which post he soon died.

To the greedy eyes of those adherents who supported Japanese expansion to the south, and not to the north,—for the purpose of

giving, as they say, an outlet to the superfluous population of the Island of Hondo (Nippon),—Formosa represented only a bridge, to support a quick passage into Fukien, Canton, Kwang-chow and Indo-China.

Encroachment into Indo-China and the effort to enlarge its possessions first of all at the expense of France, explained the spite aroused at that time among the Japanese against that country, at the time when she, together with Germany, assisted Russia to take Port Arthur away from Japan.—“Without France”, the Japanese said at that time, “England would not have forsaken Japan, and Japan would never have been forced to leave Mukden, which was subsequently worth as much as Seoul to her. The French must suffer the penalty of retaliation”.

General Baron Kodama insisted that the first blow must be aimed, not at France, but at Russia, who was the great instigator of injustice against Japan.

“It is possible that Russia, restrained by fear of attack by Germany or England, will leave us alone to decide our battle with France” said Baron Kodama in his report. “But after a successful war with France, when Japan has lost half her fleet and emptied her arsenals, she will see that Russia has prolonged her line of railways into Korea and has transferred her naval base from Port Arthur to Mozanpo, 20 miles from Sasebo, and then it will only be a step across the straits—and the Cossacks will be at us.

—“What is the result of this?”

—“On one hand—we shall have to spend our means on the development of our new possessions in Indo-China, after calming the agitation of our Allies the English, with whom we shall then be neighbours, in India. On the other hand—distrusted by the English, Germans, and Dutch, whose colonial possessions will no longer be safe after what happens to the French, we shall be forced to apportion part of our already weakened naval strength to the defence of the Annam Sea, and we shall lose the decisive struggle in the Japanese Sea, at a few miles from our own shores.

"If we allow the growth of the fleet of our Northern enemy, which is at present little dangerous, for the pleasure of fighting and easily beating the little colonial army of one of our southern enemies, who, at the present time, does not interfere with us in the least, we shall undergo the sad result of victory abroad and defeat at home. We shall give the Siberian bear time to come with slow but sure steps to the previously sacred land of Yamato, (the poetical name for Japan)".

General Baron Kodama foresaw the possibility of defeat at the hands of Russia. "But our defeat in the north", he said, "would have an unexpected result. It would give our diplomacy the trump card against France, which she is seeking to-day. Thrown back out of Korea and Manchuria, there will be nothing for us but to turn to Southern Asia, i.e. Fukien, Kwangchow, Indo-China or the Dutch Indies. Our attack on France will be lawful in the eyes of the whole world, since the owners of Hongkong, the Phillipines and Java will find it convenient to themselves that we direct our steps against France and not against them. It means that the danger which they feel near at hand will be diverted from them.

"Secondly, it will be a glorious revenge on France for the support which she has shewn Russia."

On this account, as well as by the calculation of Indo-China's value in the course of a few years after a struggle between Japan and Russia, and considerations regarding a base sufficiently solid to develop operations against Indo-China, (since the Island of Formosa was not yet ready for this role, and on the mainland Japan had no possessions) Baron Kodama began to agitate violently on military and public opinion in Japan. It was decided that in the first place there should be war with Russia after which the struggle with France for the possession of Indo-China ought to begin.

In the following paragraphs Baron Kodama's calculations regarding the plan of warfare with France will be considered. In them he lays down as a fundamental condition for success in the struggle the preparation of the Island of Formosa as a 1st class

base. Otherwise that base would have to be shifted to Nagasaki, 2,000 miles from Saigon. Such a distance is too great. It would not allow Japan to make use of TIME, upon which she relies. The French Mediterranean Squadron would arrive in time to cut the communications between the Japanese Army of invasion and the Metropolis. Besides this, relations with China were not at that time particularly good and did not allow of the Japanese hope of occupying the province of Fukien, without which the communications of Japanese armies taking the offensive in Indo-China would be most insecure.

6. From the secret report of Baron Kodama it has been seen that as early as 1902, a decided plan for the conquest of the French possessions in Indo-China had been formed in Japanese executive circles. General Baron Kodama objected only to the premature commencement of that war (in 1902) and demonstrated the necessity of first of all (a) smashing Russia, who was threatening from the north and (b) solidly preparing the Island of Formosa as a base for further progressive movement by Japan to the South.

The whole of the second part of this report is devoted to arguments shewing that it would not be profitable to start a war with France earlier than 1910 (the 43rd. Year Meidji), since by that time the threat from the side of Russia would be removed, and China, who slavishly obeyed her lead, would have escaped from her influence and would be more inclined to agree to Japan's wish to occupy only temporarily, the Fukien Province, from which lead the routes to Indo-China.

At the present time there is no need to go into all the details of these calculations, since the time which Baron Kodama was striving to gain has already elapsed a long time ago. The war with Russia in 1904-5 certainly removed the danger to Japan from the north and her hands were, it seemed, freed for a war with France. However, the new world combinations, and grouping among the great powers, which were evolving at the beginning of the Russo-Japanese war and immediately after it, did not permit Japan to begin warlike operations against France in Indo-China in 1910.

It is known that from 1901, under the influence of the rising world importance of Germany, and in counterpoise to her efforts at world dominion, a current, unfriendly to Germany, began quickly to grow and strengthen, in which England took the lead. Germany was looked upon as the great enemy and pretender to European hegemony.

France and Fashoda, Russia and her fantastic yearning to conquer India, had to give place to the threatening German realism. Simple logic ordained, therefore, a reconciliation as soon and as fully as possible, and at the same time a junction, with the Franco-Russian Alliance.

England quickly reconciled herself with France, and the Anglo-French Agreement was signed on the 8th. April, 1904. According to this agreement, all disputed questions between England and France all over the world were settled. Following this in 1908, after King Edward the Seventh's visit to Russia and the Reval meeting, the Triple Entente, (Russia, France and England) was set up.

Thus in 1910, when it had been proposed to put into effect Japan's offensive plans against French Indo-China, the political grouping in the world's with scales had altogether changed. France was now on friendly terms both with England, on whose influence Japan had relied, and with Russia, who had quickly righted herself after her ill success in 1904-5 and once again swung a threatening sword over Japan from the North.

This change in the world's political groupings, together with difficulties in Korea and rivalry which had been growing after the Russo-Japanese war between Japan and the U. S. A. in the Pacific, did not allow Japan to develop her progressive movement along the shores of Eastern Asia to the south. Besides this, the preparation of Formosa as a base, corresponding to those plans, was far from completion. Much of Japan's strength and means had been expended in the struggle with the savage and free loving native tribes and in the pacification of the Island. It must not be forgotten that, on the Island of Formosa, is a warlike native

population, reckoned at over 3 millions, and that there are only 150,000 Japanese.

After this, in 1914, Japan was drawn in another direction. The outbreak of war against Germany dragged Japan into warlike operations against her on the side of the Triple Entente, and hostile operations against France could not take place.

As a result, Japan has up to the present time been unable to realize her plan of offensive operations in the south.

The calculations, however, brought forward in the report of General Baron Kodama are extraordinarily interesting in relation to computation of strengths which Japan could throw to the south, through Formosa, and equally so regarding the computation of time in which those strengths could be prepared and despatched from the Metropolis (from the big Islands of Old Japan) to the south.

These numbers, can, nowadays, in case of complications with America, be prepared and despatched for the conquest of the Phillipines, or to other places whose strategical importance in a struggle with America demand it. It must not be forgotten that Japan's hands have now been entirely freed on the north, where worn out Russia can only look on dumbly at the world events which are destined to be played out on the shores of the Pacific. It must not be forgotten that an attack by the naval powers beyond the ocean upon the shores of Old Japan is extremely difficult. Therefore, at the present time, a greater armed strength can be thrown by Japan from the Metropolis into the colonial regions.

Baron Kodama's calculation of the French total strength in Indo-China can be applied, as somewhat analogous, when reckoning the American strength to be transported, also from afar, to the region of the South China Sea and the Phillipines.

7. General Kodama's calculation of the strength of the Japanese Army and of the time of their transport from Japan to the shore of the South China Sea, in case of war breaking out in that region is as follows:—

1st Calculation.

The time necessary for transporting the 1st Japanese Army to Indo-China.

Mobilization of 1 Division on the Island of Formosa... 10 days.

The assembling of 2 Divisions in Nagasaki would be finished within the same period.

Transport of 2 Divisions to the Island of Formosa2½ days

Landing them at Kelung and Tamsui.....1 day.

Return of empty transports to the different Japanese ports...3½ days.

At the same time, within 17 days, the mobilization and assembling at the different points of embarkation of another 5 Divisions, detailed for the invasion of Indo-China, will finish in Japan. Embarkation of these 5 Divisions into ships in Japan will take

... .. 3 days.

Their transport from Japan to Turon (on the Indo-Chinese Coast)

will occupy 7 days.

Their disembarkation 3 days.

Return of empty transports to the Island of Formosa 4 days.

2nd Calculation.

Time necessary for the embarkation of the 2nd Army.

The embarkation on Formosa of 3 Divisions assembled there on the 17th day 3 days

Their transport from Formosa to Kwang-chow (on the mainland, in the Fukien Province, on the Tomking Frontier)...3 days.

Disembarkation of the Army and provisions for 2 Armies... 2 days.

3rd Calculation.

Arrival of the French Squadron in the China Seas.

The Mediterranean Squadron leaves on the 4th day of war with a speed of 10 knots and 4 stops of 2 days each on the way at Bizerta, Port Said, Jibuti and Maskat; its passage will take 38 days for the 7,500 miles dividing Toulon from Saigon. (The distance is almost equal to that from the coast of America to the Phillipine Islands).

The strength of this squadron would be 6 battleships and 6 armoured cruisers, it is surmised.

4th Calculation.

3rd. Japanese Army.

It consists of 4 Divisions. On the calculation that the transports, after conveying the second army, can return to Japan on the 6th or 7th day after leaving Kwang-chow, that is, on the 50th day from the beginning of war, the following table is made up :—

The ships' term of 10 days idleness finishes on the 60th day.

The embarkation of 4 Divisions finishes on the 62nd day.

The disembarkation in Fukien finishes on the 68th day.

5th Calculation.

The probable strength of the French armies in Indo-China in the 43rd year of Miedji (1910) was assessed at :—

Active	20,000	Europeans and	32,000 natives.
Reserves	8,000	" "	35,000 "
Total	28,000	" "	67,000 "

(Grand total under arms 95,000), who would have finished their mobilization on the 20th day. For further reinforcement of the French armies, Kodama allows for the transportation from France and Algiers; on the 80th day, of 34,000 men; on the 101st day 67,000 men; on the 150th day, 75,000; altogether, with the preceding figures, up to 270,000 men.

Against them General Kodama surmised the despatch of 3 armies with a total strength of up to 300,000 men whose transportation to Indo-China would finish on the 17th* day, at which time the enemy would have only 95,000 men. These extracts from calculations made in case of war between Japan and France have not lost their significance to-day, although the probability of such a war has become altogether problematical in consequence of the re-grouping of the Powers; since, instead of the old rivals,

*Editorial note. This is probably a misprint for 70th day.

here have arisen new. Instead of the rivalry with France, Japan to-day has to vie with America in these parts. This rivalry will be more clearly seen when the lack of vitality of the conditions woven at the Washington Conference become manifest and when the Pacific Powers once more strain irresistably towards the realisation of their vital problems on the Pacific shores.

These calculations allow one to ring up the curtain on the carefully concealed secret hypotheses of the General Staff, and on their perfected plan of campaign. On the foundation of Baron Kodama's reckoning concerning the struggle between Japan and France in the Southern China Sea, some deduction can also be made regarding a struggle between Japan and America in that same sea. America is separated from it by practically the same distance as France is and has only her colonial army and a comparatively small fleet there. Consequent deductions will be put forward in an article to follow.

A RIVER BATTLE

AT the end of October, 1918, the British Forces in Italy took a leading part in a combined attack with the Italian and French Armies on the Austrian Army. The attack was a complete success; as a direct result, the Austrian Army ceased to be a military factor in the war, and the Austrian Empire collapsed shortly afterwards. Nevertheless, those operations have never received the attention they deserved. At that time great battles were taking place in France almost daily; the political situation in Eastern Europe and Asia provided fresh crises in quick succession; a war weary world was already speculating on the coming peace. It is little wonder that under so many distracting influences not only civilians but soldiers also found little time to study the fortunes of the British Force that so worthily upheld the reputation of the British Army in Northern Italy.

Yet these operations were well worth study. They were carried out in the face of extraordinary natural difficulties against an enemy superior in numbers. The full story of how these difficulties were completely overcome will doubtless be written in due course. The following narrative merely gives an account of the operations of one Brigade, but it is hoped that the almost unique circumstances under which these operations were carried out will invest the story with a certain interest. The Brigade in question was the 69th Infantry Brigade of the 23rd Division, which at that time I had the honour to command.

The following is a brief outline of the events leading up to the attack. On October 16th, the XIV British Corps consisting of the 23rd and 7th Divisions was concentrated near Treviso. The next five days were spent in closing up to the Piave River, reconnaissance of such parts of the enemy's position as could be seen from the west bank of the river, and boating practice on a tributary of the Piave near Treviso. The weather was abominable and doubtless served to accentuate the effects of an epidemic of influenza which at the time

swept through the British force, robbing it at this critical moment of many valuable officers and men. On October 21st the 14th Corps took over the sector of the Italian line from Salletuol to Palazzon, a frontage of about 4,000 yards. The 7th Division was on the right with the 22nd Infantry Brigade in the line, the 23rd Division on the left with the 69th Infantry Brigade in the line.

These movements formed part of the preliminary to an attack by the Tenth, Eighth and Twelfth Armies across the Piave. The 14th Corps formed part of the Tenth Army which had recently been formed under the command of General Lord Cavan. The remainder of the Army consisted of Italian troops. The role of the Tenth Army was to advance in a north easterly direction to a depth of about 10 miles, and protect the right flank of Eighth and Twelfth Allied Armies, who were to attack in a northerly direction. The task allotted was direct enough, but between us and its accomplishment lay the Piave river. This formidable obstacle had twice within a year served to bring disaster on the Austrians when success appeared well within their grasp.

The Piave debouches from the Venetian Alps at Valdobbiadene and, after passing through a narrow belt of foothills, flows through the almost unbroken flatness of the Venetian plain until it straggles into the sea through a succession of marshes and waterways east of Venice. Its general course is south eastward. The plain is remarkable chiefly for its flatness and fertility, being a mass of small enclosures surrounded by straggling hedges. Roads are plentiful, but moderate in quality. The whole district is dominated by the escarpment of the Venetian Alps which rise abruptly from the plain, but the view obtained from them was so distant that it could have little effect on the operations. Infinitely more menacing was an under feature about five hundred feet high near Susegana, on the enemy's side of the river. During these operations, this small wooded hill acquired an importance altogether out of proportion to its size. Owing to the flatness of the country to the south, from it the enemy's observation posts could obtain a splendid view of a long stretch of the Piave, including that sector allotted to the 14th

A River Battle.

Corps, and it was artillery fire directed from this hill that so greatly delayed bridging operations during the early part of the battle. As to the river itself, General Lord Cavan gives the following description in his despatch on the battle. "The breadth of the Piave at the front of attack was approximately one and a half miles, consisted of numerous channels dotted with islands. The main island was the Grave di Papadopoli, which was some three miles long by one mile broad. The current varied according to the channels. In the main channel it ran at a rate exceeding three miles an hour in time of flood, and never dropped below three and a half miles an hour at summer level.

The enemy held the Grave di Papadopoli as an advanced position. Reconnaissance was extremely difficult from the west bank of the river, whether carried out from the front line on the bank or from observation posts in trees and houses further back. Thick bushes and islands obscured the view of the enemy's front line, while the dead flat country was almost devoid of landmarks. Good aerial plane photographs were available, but these are at the best of times a poor substitute for personal observation.

Fortunately the deepest and strongest of the many streams between us and the enemy lay under our bank. This stream was about a hundred yards across, ran deep and swift, and was quite unfordable. On the far side of it lay Grave di Papadopoli, and beyond that again numerous other streams all reported fordable. It was obvious that Papadopoli, with the unfordable part of the river west of it, would be a splendid "point d'appui". Indeed, owing to the comparatively few boats at our disposal it was impossible to stage any attack on a big scale without using it as a forming up place.

When we took over the line on October 21st, the river was in high flood as a result of recent rains. An improvement in the weather soon brought the river to a lower level and on the night 23/24 October the 22nd Infantry Brigade captured the greater part of Papadopoli by a brilliant surprise attack and held it against fierce counterattacks. The capture of the island was completed on the night of the 25th/26th, Italian troops co-operating.

No time was lost after our first lodgement on the island in getting the troops over for the big attack. The passage could only be accomplished at night, and only a limited number of boats were available. These were manned by highly skilled Italian boatmen. Owing to the depth and strength of the stream, the passage was a slow and arduous business, and each boat only took six men across per trip. The attack by the 22nd Infantry Brigade had thoroughly stirred up the enemy, and the crossings were almost continuously shelled. In spite of danger and intense fatigue these boatmen stuck to their work in a manner that aroused the enthusiasm of our troops. During the nights preceding the attack they worked from dusk to dawn with unflagging energy and cheerfulness. By the night 26th/27th the whole of the 68th, 69th and 91st Infantry Brigades were assembled on the island. Some of the troops had been on the island for three nights, and had had a pretty bad time. They had been forced to lie on the shingle most of the time under intermittent shell fire and had been cut off from all hot food. Fortunately casualties had been slight.

The first objective for the 69th Infantry Brigade in the attack was the enemy's front line on a frontage of 1200 yards. The final objective for the first day was a section of 1600 yards, on the road running parallel to the river through Borgo Malanotte. This entailed an advance of 2400 yards.

The units of the Brigade were:—the 11th West Yorkshire Regiment, the 10th Duke of Wellington's Regiment, the 8th Yorkshire Regiment and the 69th Light Trench Mortar Battery. A company of the 23rd Machine Gun Battalion was attached to the Brigade for these operations. The Infantry Battalions were considerably below strength, companies averaging about 80 all told.

The frontage to be attacked was considerable in proportion to the rifles available, and the advance from the enemy's front line to the final objective was through thick and heavily fortified country. It was, therefore, decided not to deploy the Brigade sufficiently to cover the whole front, but to attack on both flanks of the sector on

A River Battle.

a comparatively narrow frontage. It was intended to squeeze out or mop up by subsequent operations the enemy in the area between the two lines of attack. The 8th Yorkshires were to attack on the right and the 10th Duke of Wellington's on the left. One Company of the 11th West Yorkshire Regiment was to mop up the gap between the two main attacking columns. This company was not to take part in the assault but to follow closely the attacking battalions. The 11th West Yorkshire regiment less the aforementioned company were to follow on as soon as the enemy's front line was captured and go into Brigade Reserve about Zandonadi. Each of the two front line battalions had attached to them one section of machine guns and one section of Light Trench Mortars, both guns and ammunition being manhandled. The remainder of the Machine gun company attached to the Brigade was concentrated about Lovadina. It was fitted out with pack transport and was ready to move forward as soon as a bridge was built capable of carrying mules.

The 68th Infantry Brigade were attacking on the left, and the 91st Infantry Brigade of the 7th Division on the right.

The bombardment of the enemy positions commenced at 11-30 p. m. on the 26th. The enemy replied with some intermittent shelling but failed to interfere with our boating operations and the whole of the attacking Brigades were concentrated in their forming up area in good time.

At 6.15 a.m. on the 27th our barrage came down on the enemy's front line and the advance from the Grave di Papadopoli commenced. Unexpected difficulties were experienced before the enemy's front line could be reached. The channels to be traversed had been reported to be easily fordable, but the river still showed the effects of the recent rains and the water was running deep and swift in many places. Officers and men were repeatedly swept off their feet. Owing to obvious difficulties of supply, it had been necessary to carry considerable quantities of food and ammunition on the man; as a result the troops were at a considerable disadvantage in their fight with the current, and those who lost their feet were in great

danger. A considerable number were drowned, other were swept down stream and only reached the bank in a condition of complete exhaustion. It was found impossible for men of ordinary physique to carry heavy burdens such as Vickers guns through these streams. As a result nearly all the Vickers guns and a great proportion of the Lewis guns and Trench mortars were unavoidably lost.

Notwithstanding the disorganisation consequent on the unexpected difficulties the attack pressed on and the enemy's front line along the river bank was carried after a stiff fight. This was a considerable achievement as the position was one of great natural strength and in addition was heavily wired and strongly held. Fortunately the enemy had no stomach for a hand-to-hand contest with British infantry and after causing us considerable casualties, by machine gun fire, he lost his nerve when he saw our men determined to close with the bayonet.

After a short halt to re-organise and collect prisoners the attack pressed on. The situation at this time was not satisfactory on either flank. On the right the 91st Infantry Brigade had been strongly opposed and it was some time before they could capture their first objective. As a result they were delayed in their further advance. On the left the 69th Infantry Brigade, whose left flank was only protected by a barrage, had come under very heavy cross machine gun fire. One battalion suffered severe casualties, and at first only a portion of the frontage allotted to them was captured. Even this was a fine performance considering the natural difficulties and determined opposition to be overcome. The 69th Infantry Brigade was lucky in comparison in striking a comparatively soft spot. The casualties suffered by the 69th Infantry Brigade and the failure of an Italian attack further north which was planned to join up with them caused a change of plans and considerable delay in their further advance.

At 11 a.m., as it was found impossible to control or even keep in touch with operations from the western bank of the Piave owing to communication difficulties, Brigade Headquarters crossed the river and was re-established at Zandonadi. It was on the

extreme right of the Brigade, but was comparatively easy for runners to find and a good road ran forward to the day's final objective.

By noon the situation was more satisfactory. The Brigade had fought their way steadily forward and had captured their final objectives for the day with the exception of the hamlet at Borge Malanotte where the enemy was putting up an obstinate resistance. The 91st. Infantry Brigade had worked forward on the right flank and were in touch with us on the final line. The 68th Infantry Brigade had extended their grip on the enemy front line and were pushing forward to protect our left flank. Shortly after noon a company of the 11th West Yorkshire Regiment from Brigade Reserve captured Borge Malanotte after a sharp fight. Amongst the prisoners taken here was a Regimental Commander and his Staff. Their headquarters had been in the hamlet, which doubtless accounted for the stout resistance of the garrison. Although the Brigade had attained all its objectives, and the enemy was for the time being incapable of further effort, the situation was by no means free from anxiety. The Brigade front was now held in depth by ten weak companies. The enclosed nature of the country seldom allowed a field of fire of more than two hundred yards, and the line was not protected by either natural or artificial obstacles. Under the circumstances it was not practicable to withdraw any of the front line companies into Brigade reserve, which was now reduced to two companies. A considerable portion of the Lewis guns had been lost in crossing the river, but the Vickers guns had now been replaced by captured Austrian machine guns of which there was a liberal supply available. These captured guns, manned by personnel of the Machine Gun battalion, did excellent work in the ensuing operations. The most disquieting feature of the situation was the shortage of small arm ammunition caused by the large expenditure in the fighting subsequent to the capture of the enemy's front line. A small dump of ammunition had been established at Zandonadi by a carrying party of the reserve Brigade (70th Infantry Brigade), but the carry was a long and difficult one, and no great supplies could be relied on from this source. At this time (mid-day 27th

October) the Brigade only averaged about twenty rounds per rifle and about a hundred rounds per Lewis gun. It was certain that the enemy still had large reserves of Infantry available. It was uncertain, however, if he would use these for counter attack or to fill the gaps in his shattered line.

To meet the situation the reserve battalion was moved to a more central position at Case Rizza and Divisional Headquarters was asked for a battalion from the Divisional Reserve Brigade. This request they were unable to grant. However a lien was given on the services of two Italian battalions who were under orders to cross the river during the night with a view to extending the attack northwards the following morning. As these battalions were on the move the whole night it was not found possible to get in touch with them and they would not have been available in case of emergency.

The afternoon passed very quietly on the Brigade front, though enemy artillery and aircraft were very active against the bridging operations to our rear. A certain amount of ammunition was successfully dropped for us by our aeroplanes during the afternoon, and towards evening the river was sufficiently bridged to allow pack transport to cross and a welcome reinforcement arrived in the shape of a pack train, bringing Vickers guns, Light Trench Mortars, ammunition and rations.

The night was an anxious one for those who realised the true situation. We were a comparatively weak force, unprotected by either wire or natural obstacles in a country favourable to surprise attacks. Movement of reserves and intercommunication was difficult. At our back lay a broad and unfordable river, insufficiently bridged. If we were attacked during the night withdrawal would lead to disaster, and speedy reinforcement would be impossible.

Fortunately the enemy was badly demoralised by the rough handling he had received during the day, and the night passed without infantry action. Our position were shelled intermittently on dusk to dawn,

A River Battle.

During the night orders were received from the Division to renew the advance in the morning on objectives previously arranged. These objectives entailed an advance of about 2,500 yards.

At 08-30 hrs. on October 28th the advance was renewed, the 8th Yorkshire Regiment attacking on the right, and the 11th West Yorkshire Regiment passing through the 10th Duke of Wellington's Regiment on the left. Both attacking columns moved forward on a front of 300 yards astride suitable roads, widely extended movements being impracticable in this type of country. Brigade Headquarters moved forward to Borgo Malanotte, and the 10th Duke of Wellington's concentrated at this hamlet and went into Brigade Reserve.

The advance went smoothly, very little opposition being met with except on the extreme left where some machine guns caused some trouble. The objectives were reached at 11 a.m. Casualties were very slight but unfortunately included the Commanding Officer of the 11th West Yorkshire Regiment. Touch was maintained without difficulty with the 91st Infantry Brigade on the right and 68th Infantry Brigade on the left.

This advance took us beyond the protective range of our own Field artillery who, owing to the bridging difficulties were still west of the Piave.

It was now necessary to get touch with the enemy. The 8th Yorkshire Regiment and 11th West Yorkshire Regiment were therefore ordered to push forward strong patrols to the villages of Vazzola and Soffrata respectively. Both these objectives were reached before dark, the West Yorkshire patrol surprising and capturing fifty Austrians at Borgo Villa.

No proper contact had been gained however, and both battalions were ordered to push a company on under cover of darkness to attempt to seize the bridges over the River Monticana north east of Vazzolo and Soffrata.

During the night both companies reached the Monticana river and reported the far bank strongly held by the enemy.

At 8-30 a.m. on the 29th the advance was continued, the objective being first the line of the Monticana River and secondly the line of the road from Cimetta to Casa Colleton. The 8th Yorkshire Regiment and 11th West Yorkshire Regiment again led the advance. Brigade Head Quarters were at Soffrata and the 10th Duke of Wellington's in Brigade Reserve at Borgo Villa.

It was soon evident that the advance was to be hotly contested. Fresh Divisions from reserve had been brought up to oppose us and strong forces of enemy infantry supported by machine guns and artillery of all calibres were holding the far bank of the river. Heavy fighting soon developed and the situation remained confused and fluctuating for the greater part of the day. A regular "soldiers battle" took place. No artillery support was available as the bulk of our artillery was still west of Piave. Some batteries were got across during the day but did not arrive until evening and took no part in the fighting. The country near the river was subdivided into small cultivated fields by ditches and high straggling hedges. Such ground was highly suitable for platoon tactics and platoon weapons; rifle, bayonet and Lewis gun played a leading part in the days fighting. Fortunately the river Monticana itself proved by no means a formidable obstacle and was fordable in most places. The previous day's advance had carried us well clear of the enemy's defensive zone, and movement was unhampered by artificial obstacles.

About 10 a.m. the 8th Yorkshire Regiment forced a passage north east of Vazzalo after heavy fighting and in spite of considerable shell fire. They subsequently advanced to the outskirts of Cimetta fighting the whole way. They were then heavily attacked from the right flank (the 91st Infantry Brigade had been held up at the river) and were obliged to retire about three hundred yards from the village. Here they maintained themselves in spite of determined counter attacks against their front and right flank. About 3 p.m. the 91st Infantry Brigade forced a crossing and relieved the situation on the right. Shortly afterwards the 9th York and Lancaster Regiment was sent up from the Divisional

A River Battle.

Reserve, and with this reinforcement the village of Cimetta was carried in combination with the 91st Infantry Brigade. A defensive line was formed covering the village and successfully maintained. With the approach of darkness the enemy withdrew.

Meanwhile on the left confused fighting had been taking place for the best part of the day. About 10.30 a.m. a crossing was forced about Casa Balbi and a small bridgehead was established. Further attempts to advance were frustrated by repeated counter attacks from the left flank. About noon two companies were sent up from the 10th Duke of Wellington's in Brigade reserve. One company was ordered to strengthen the left flank of the bridgehead formed by the 11th West Yorkshire Regiment and the other was sent round to cross the river north of Vazzolo and clear the ground between the two bridgeheads. These measures were successful and by 6 p.m. the line had been carried forward by constant fighting to the line Cimetta-Casa Colleton. During the night touch was established with the 9th York and Lancaster Regiment covering Cimetta and a continuous front was held by the Brigade from Cimetta to Casa Colleton. The left flank was covered by the 66th Infantry Brigade and we were in close touch with the 7th Division on the right.

The night passed quietly and by the following morning it was evident that the battle was over. Early on October 30th the Austrians were in full retreat and the 70th Infantry Brigade passed through our battle outposts to take up the pursuit.

During the three days operations 2650 prisoners and 14 guns were captured by the 69th Infantry Brigade. This number of prisoners was considerably in excess of the fighting strength of the Brigade.

This narrative has given an account of the operations from a purely local point of view. But the experiences of this Brigade were typical of the whole battle, and it may be interesting to touch shortly on the wider aspects of the operations.

Two main features stand out as a result of a careful study of these operations; the audacity of the Allied plan of attack, and the

failure of the Austrian command to make use of the opportunities created by the great natural strength of their defensive position.

There is no doubt that moral rather than physical factors governed the Allied Army plan of attack. Taking purely material factors into consideration, the Infantry was asked to perform an impossible task, namely to attack an enemy of approximately equal numbers, entrenched in a position of great natural strength, improved by every artificial means known to modern war. There was no compensating factor of overwhelming artillery support. Indeed the preliminary bombardment was from unavoidable causes insufficient both in duration and power of metal judged by modern standards. The Austrian Army at this time was still a formidable machine. Its organisation was on modern lines and it was well equipped with munitions of all kinds. But it suffered from two fatal disabilities. Its High Command was lethargic, irresolute and failed to command the confidence of the Army. Even more fatal to their cause was the low morale of a considerable portion of the Infantry. Racial jealousies, poor feeding and war weariness had seriously reduced the fighting value of the majority of their Divisions. Some Divisions fought well to the end, but there was nearly always a weakness at some point of the line that provided the fatal soft spot. The weak link could always be found if the chain was tested with sufficient vigour.

On the other hand the British Forces and their allies were in splendid fettle and confident of victory. During the Summer a series of successful minor operations had raised morale to a high pitch without incurring sufficient casualties to impair efficiency. Officers and men were well trained and confident in each other and their weapons.

Nevertheless on two occasions the success of the attack was in serious danger and vigorous action by the Austrians might have had disastrous results to the Tenth Army. The first crisis occurred when the British infantry reached the uncut wire in front of the Austrian front line.

Their failure to hold the front line with more tenacity showed almost incredible weakness. A detailed description of this line

A River Battle.

is necessary to emphasise this point. Situated behind an artificially raised river bank about 12 feet high it was protected by several broad belts of low and well concealed barbed wire which were hardly touched by our bombardment. At frequent intervals were well sited machine gun nests protected by emplacements of concrete and steel, impervious to anything except a direct hit by a heavy shell. The field of fire in most places commanded several hundred yards of bare shingle sand swift river channels. Their line was screened for the most part by the Islands in mid-river from observation from the west bank of the Piave. A more ideal line of defence it would be hard to imagine, and if stubbornly defended with rifle, bomb, and machine gun it would have been almost impregnable. Yet the Austrians allowed themselves to be driven out of it by a force of British infantry of about equal strength. This was a fatal act of weakness as they had devoted all their labour on strengthening their front line system and their defences were singularly shallow. There was a belt of great strength extending about a mile from the river and behind that practically nothing in the way of artificial obstacles.

During the first 48 hours after the crossing the situation offered a splendid opportunity for counter offensive action to the Austrian High Command. A comparatively weak allied force lay isolated by a natural obstacle that prevented close artillery support, efficient supply services, or reasonably quick reinforcement. Unprotected by either natural or artificial defences, such a force would have presented a tempting prey to an energetic and determined commander. But the Austrian High Command handled their reserves irresolutely, and eventually used them in a purely defensive role.

To sum up, it may fairly be said that both the High Command and the fighting troops of the Austrian Army were cowed by the superior morale of their opponents. General Diaz and General Lord Cavan staked everything on their confidence that this would be so. Events amply justified them, and yet another example of the truth of Napoleon's famous dictum on the relative values of the moral and physical factors in war was added to the pages of military history.

SOMALILAND, 1884-1919.

LECTURE GIVEN AT THE STAFF COLLEGE QUETTA, IN 1922,

By Major H. L. Ismay, 11th Cavalry F. F.

Precis.

1. Introductory. (a) Our obligations in Somaliland.
(b) Boundaries and physical geography.
(c) The birth and character of the rebellion.
2. The First Expedition. Appreciation of the Situation. The Operations. Actions at Samala (2nd and 3rd June 1901) and at Ferdiddin 17th July 1901.)
3. The Second Expedition. The action at Erigo. (6th Oct. 1902).
4. The Third Expedition. Strategy. Plan. Operations of the Obbia Column. The disaster at Gumburu. The action at Daratoleh. The Mullah's escape to the Nogal Valley.
5. The Fourth Expedition. The difficulties of the situation. Preparatory measures. The enemy deceived. The action at Jidballi. (10th Jan. 1904.)
6. The agreement of Illig. 1905. The reappearance of the Mullah. 1908. The Expedition of 1908-10.
7. Coastal Concentration. Outline of the policy. Its results. The action at Dul Madoba. (Aug. 1913.)
8. The re-occupation of the Interior. The actions at Shimberris. (Nov. 1914 and Feb. 1915) Dervish Forts.
9. 1915-1919. The general situation. Patrolling. Skirmishes with small parties. The actions at the Endow Pass (Oct. 1917,) Ok, Rajuna, March (1919). The abortive pursuit to Ankhor. The stage set for the final expedition.

Somalland, 1884-1919.

Introduction.

1. The rebellion of Mahomed bin Abdille Hassan, more generally known as "The Mad Mullah of Somaliland", started in 1899. It was not until 1920 that it was finally crushed.

Although the main purpose of my lecture is to give you an outline of the expeditions and minor operations which took place during these years, the narrative would not be clear without a somewhat lengthy introduction in regard to the following points:—

1. The story of our connection with Somaliland, and the nature and extent of our obligations in that country ;
2. A description of the country ;
3. The birth and character of the rebellion.

Our Connection with Somaliland.

2. With regard to the first of these points, our connection with and obligations in Somaliland. In 1884 we took over the Somali coast from Berbera to Zeyla from the Egyptians; and we concluded treaties of protection with all the tribes, except the Dolbahanta.

Obligations.

In view of what follows, I will quote you an extract from the terms of these treaties. "The British Government is desirous of maintaining relations of peace and friendship with the tribes, and undertakes to extend to them the gracious favour and protection of Her Majesty the Queen Empress." I would ask you to note the unequivocal promise of protection

Advantages of our Occupation.

3. Our motives in undertaking this new responsibility were not entirely disinterested. In the first place, we had secured Berbera, a natural harbour and only 150 miles from Aden. Even if we had no particular need of it ourselves, we certainly did not want any other European and potential enemy Power to have it ; and Germany was known to be throwing out feelers in this direction.

In the second place, the Western frontier of our new Protectorate marched with Abyssinia. This, in the event, has proved a

mixed blessing, but it gave us a point of vantage from which to "keep a finger in the Abyssinian pie."

Lastly, 58,000 square miles was added to our African Empire ; not very promising country perhaps, but there seemed no reason why, with development, it should not at any rate pay its way.

Advantages to the Somalis.

Taking it all in all, therefore, it looked like a good stroke of business from our point of view. From the Somali point of view the position was equally satisfactory. Taxation was limited to very light import and export duties at the coast towns; their own tribal leaders continued to run their internal affairs, with a central government to appeal to when necessary; their country was prosperous and, comparatively, peaceful. I qualify the word peaceful, because inter-tribal raiding followed by inter-tribal fighting is really a national pastime, not unlike county cricket at Home and hardly more serious. This happy state of affairs continued until 1899, when the Mullah first appeared on the stage in a violent rôle ; and for 21 years there was no peace in the land.

The Country.

4. The next point in my introduction is a description of the country. Somaliland has an area of some 320,000 square miles and is partitioned into spheres of influence amongst France, Great Britain, Italy, and Abyssinia, the British Protectorate occupying the north-central portion. It must, however, be borne in mind that the Mullah's range of movements extended from Cape Guardafui to the Equator, and from the Sea to the Abyssinian border, with the result that our operations were carried into both the Italian and the Abyssinian spheres.

It is therefore necessary to say a few words about these neighbours of ours.

Italian Somaliland.

The Italians exercise little influence in their Protectorate. They nominally run the country through the Sultan of the Mijjer-tein and the Sultan of Obbia, to whom they pay annual subsidies,

but they keep up no garrison and their subjects do not take them seriously.

Abyssinian Somaliland.

The Abyssinians, though unable to keep their own house in order, much less their outlying territories, have on occasion co-operated usefully.

French Somaliland.

The French do not come into the picture, except in so far as they have permitted and even encouraged and profitted by the importation of arms and ammunition through Jibouti.

Physical Geography.

5. As regards physical geography, Somaliland can be divided into three distinct tracts:—

1. The fringe of maritime plain between the Maritime Mountains and the sea.
2. The Maritime Mountains.
3. The raised plateau, some 6,000 feet above the sea level at its northern edge, sloping evenly to the River Webi Shebeli in the South.

It is with the characteristics of this plateau that we are chiefly concerned, and I especially desire to dispel the illusion that it is a second Sahara. On the contrary, you find every kind of feature—mountain ranges, smaller hills, dense bush, open meadowland, closely intersected country, undulating country, and dead level country.

There are no permanent habitations. The Somali is a nomad whose chief object in life is, I might say, whose very livelihood depends on, finding grazing for his flocks.

Factors affecting operations.

6. From the point of view of operations, the dominating factor is water. Its quantity is limited, and its quality in most places is peculiarly vile. A close second is the question of transport, as the narrative of the Expeditions will show. It is in fact a country

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where, if a force is too large, it is extraordinarily hard to maintain and, if it is too small, it runs a chance of disaster.

Character of the Rebellion.

7. The third point in my introduction is the birth of the rebellion and its character. The general opinion appears to be that it was due to fanaticism, and that the Mullah was a mad man. I desire to show, on the one hand, that fanaticism characterized and strengthened, but did not cause the revolt; and on the other, that the Mullah's conduct throughout was the perfectly rational conduct of an extremely ambitious and extremely capable man. If there was any madness in his composition, it was only that madness which is akin to genius. The cause of the rebellion was the desire of Mahomed bin Abdille Hassan to be not only the temporal, but also the spiritual lord of all Somaliland. Its successful continuance was due to this man's remarkable personality and to his insight into not only the minds of his own people but also of the British politician. He was author, stage manager, and principal actor in a play that ran for 21 years, and he pocketed all the receipts. Nor was there any question of an understudy carrying on if the principal was removed; for he allowed no-one to play "Khalifa" to his "Mahdi".

The Mullah's early life.

8. Mahomed bin Abdille Hassan was born in 1868. When he was about 18 years old he went to sea as a fireman, and it is probable that his experiences greatly influenced his future career, for at Egyptian ports he must have heard wonderful tales of the Mahdi of the Soudan, then at the zenith of his power.

The Birth of the Movement.

After this he made several pilgrimages to Mecca, and on his return from one of these in 1895, he attempted to start a Nationalist movement in Berbera with a slogan of "Somaliland for the Somali, and out with the infidels." But the comparatively sophisticated and perfectly contented inhabitants of the Capital would have none of him, and he repaired to the interior and lived with his mother's people, the Dolbahanta. Here he gradually acquired influence

by preaching nationalism to less sophisticated folk and by stopping inter-tribal warfare, and finally he added the religious plank to his platform. Many adherents, including practically the whole of the Dolbahanta, now flocked to his standard, but the larger portion of our tribes still held aloof. For three years he educated his followers in the way they should go, the main points of his doctrine being his own omnipotence, the sanctity of his person, and the theory that all who were not with him were against him, and infidels into the bargain.

Open Rebellion.

9. In 1899 he committed his first overt act of hostility. Suddenly swooping on Burao, he raided our friendly tribes in the vicinity and forced certain wavering sections to join him. He repeated the performance in August, on this occasion giving out that he was the Mahdi, and that he would soon advance on Berbera. Owing to our commitments in South Africa, no action was taken against him and he continued his career of violence with such success that in August 1900 the Consul General reported that the tribes were losing confidence in our ability to protect them and might be driven to make the best terms they could with the Mullah.

The First Expedition.

10. The first expedition was sanctioned and the command entrusted to Captain (Local Lieutenant-Colonel) Swayne, Indian Army.

Appreciation of the Situation.

From the military point of view the situation may be appreciated as follows :—

Our own forces in the Protectorate :—Nil.

Mullah's Forces.

1. Personal following :—5,000 men, most of whom were mounted, and about 600 of whom were riflemen ;
2. The tribes which were certain to support him :—20,000 fighting men, chiefly spearmen.

3. Doubtful tribes, which would probably join him if we suffered a reverse :—60,000 spearmen.

Location of the above :—" Somewhere in Somaliland and constantly changing "

Objective.

With regard to the objective of the expedition, I will read an extract from one of the Mullah's letters to the British, not only because it gives such a clear picture of the situation but also because it is so typical of the man who wrote it. "I wish to rule my own country and protect my own religion. I have no forts or houses or cultivated fields, no silver or gold for you to take. If the country was cultivated or contained property, it would be worth your while to fight. The country is all jungle, and that is no use to you. If you want wood and stone you can get them in plenty. There are also many ant heaps and the sun is very hot. All you can get from me is war. (And now comes the touch of vainglory that gives us our cue) I like war, but you do not. I have horses, camels, cattles goats and sheep in plenty. When I get news of good grazing I will go to that place."

Our obvious objective then was his live stock, the capture of which would compel him to concentrate to fight us, or to make terms. The all-important factor affecting the attainment of this objective was to be able to march faster than the enemy.

Swayne's plan was as follows :—

Plan.

1. To raise a local levy of 500 M.I. on camels and ponies and 1,000 Infantry, under 21 officers from England and India, and
2. With this force to march against the Mullah, wherever the latest information located him.

Operations.

11. In May 1901, only six months after recruiting had started, the levy left Burao and marched on Yahelli at which place the Mullah with the majority of his followers and stock was reported to be. The Mullah's former Headquarters in the Ain Valley was

burned and a good deal of stock was captured from hostile tribes encamped near the line of march.

At Samala Swayne left the bulk of his transport and his captures with a guard of about 400 infantry under Captain McNeill, and, with a lightly equipped Column, moved S.E.

The action at Samala.

The captured camels and transport proved a temptation which the enemy could not resist, and McNeill was attacked by 3,000 to 5,000 on the 2nd and 3rd June. But he was strongly zaribaed in a naturally strong position, and the attacks were beaten off with considerable loss to the enemy and little to ourselves. As the beaten enemy were dribbling away to the South, Swayne got into them with mounted troops and hunted them as far as the S.E. corner of the Protectorate.

The Mullah had got away to the Mudug, in Italian territory and Swayne's request to follow him thither was refused. He therefore retraced his steps to Samala and proceeded to deal with the tribes which had been implicated in the rebellion.

Action at Ferdiddin.

Meanwhile the Mullah, being threatened from the South by the Sultan of Obbia, moved north again to Beretabli. Swayne marched rapidly down and fell on him at Ferdiddin, routing him completely, and driving him headlong over the border. In order to reach the Mudug alive the Mulla had to drink the water found in the stomachs of dead camels.

Swayne's force now returned to Burao.

The second expedition.

The Mullah re-appears.

12. For a brief period the Mullah was quiescent, but while discussions regarding the future military policy in Sommaliland were still going on, he re-appeared in the Ain Valley with a force of about 12,000 men, most of whom were mounted, and including 1,000 riflemen. An immediate counter-stroke was considered necessary. The levy was increased and 360 K.A.R. were brought

in from B.C.A. as a stiffening. The command of the second expedition was again entrusted to Colonel Swayne.

The course of Operations.

13. I have not sufficient time to discuss the moves, the raids and counter raids of the next eight months. Suffice it here to say that on the 2nd October, Swayne was at Baran and the Mullah was in the Mudug, more or less immobile owing to the weakness of his transport camels and ponies as a result of the prolonged drought.

Action at Erigo.

Swayne advanced to attack him before the November rains would give him the chance of slipping away, and on the 6th October was fought the action of Erigo. This was an encounter battle in dense bush and it is difficult to get at the truth of what actually happened. From a combination of the official report and the stories of men of both sides who took part in the fight, I gather that our protective measures were at fault, and that the enemy suddenly attacked us from all sides. The left and front faces of the square broke and the transport stampeded.

Eventually the handful of officers pulled the show together. The square was reformed and most of the loads were recovered, but a Maxim was lost. The enemy drew off and by night all was quiet.

Swayne's intention was to continue his advance on Mudug, but the senior officers reported that they could no longer rely on their men to fight, and the force retired on Bohotleh with all speed. With even greater speed the enemy went off in the opposite direction. Neither side had any idea of how hard the other had been hit.

The third expedition.

The result of Erigo.

14. Swayne's retirement from Erigo created a new development in the situation. It was feared that a cessation of operation against the Mullah would result in a general rising of the Dolbahanta, while it was also considered that Somali troops were

not to be relied on to carry out further operations. It was decided to bring in Regulars and to launch a third expedition.

General Manning was appointed to the command and the War Office took over the conduct of operations from the Foreign Office.

Strategy.

15. The strategy of this expedition was based mainly on two considerations. Firstly, to prevent the Mullah, who was now at Galadi, from retreating to the Webi Shebeli, whither it would have been difficult to follow him, and to drive him north into or towards British territory and deal with him there. Secondly, to hem in his forces by a simultaneous advance from the S.E. and N. by the British and from the W. and S.W. by the Abyssinians. After some demur, the Italian Government gave their assent to our operating through their country, and the following plan was decided on :—

Plan.

16. A force was to advance from Obbia and occupy the Mudug. There it would be joined by a Column from Bohotleh, and a mobile column from the combined force would be organized to pursue the Mullah. Meanwile 5,000 Abyssinians, with two British officers for liaison, were to have reached the Valley of the Fafan, in order to prevent his retreat in that direction.

Preparations.

17. Work on the Berbera—Bohotleh line was immediately put in hand; the construction of a road, the improvement of the water supply, and the erection of blockhouses; while supplies were pushed up as fast as possible both for the flying Column based on Bohotleh and for the Obbia Column, which was ultimately to be fed from that place.

Obbia Force Operations.

18. The Obbia Force was disembarked with considerable difficulty in January 1903 and Manning with 1,100 reached Galkayu

without meeting opposition early in March. Owing to lack of transport and the inadequate water supply on this route, it had been necessary for the force to march in two portions. The rear portion reached Galkayu on the 24th March, and on the 25th March a Column of 350 men under Colonel Plunkett joined up from Bohotleh.

The latest intelligence located the Mullah at Galadi with 2,500 riflemen, 5,000-6,000 horsemen, and about 16,000 spearmen.

With a lightly equipped Column of 1,100 Manning moved to Galadi, only to find that the enemy had retired on Wardair.

He was now obliged to hold hard until he could receive supplies and reinforcements which would enable him to advance with a minimum force of 1,000.

Reconnaissance towards Wardair.

19. In the meantime, he sent off a strong reconnaissance of 450 rifles, under Colonel Cobbe, with orders to reconnoitre the road to Wardair, and to occupy the wells there if possible, but not to attack if he had reason to suppose that the enemy main force was at hand. In view of the disastrous sequel to this reconnaissance, and the controversy which raged round it, I will tell you the story in detail.

Action at Gumburu.

On the morning of the 17th April, Colonel Cobbe was in camp near Gumburu. He sent off a company of the 2nd K. A. R. to reconnoitre up to three miles to the west. At 08-05 he received a message from Captain Olivey, the Company Commander, that enemy horse and foot were advancing, that he was retiring slowly and required reinforcement. Cobbe sent off Plunkett with another company of the 2nd K.A.R. and 50 of the 2nd Sikhs to bring Olivey in.

Plunkett met Olivey one mile from the zariba and out of action, but, instead of returning, proceeded to advance on the enemy. About six miles from the zariba, in very dense bush, he was attacked by overwhelming numbers. The square fought magnificently and it was not until their ammunition was nearly exhausted, that it was broken by a rush of spearmen.

Out of nine officers and 216 men, only 29 wounded managed to get back to camp. Cobbe knew nothing of what was happening until it was all over, nor in any case could he have done anything but swell the "butcher's bill," for he had only 250 men left, and the transport and water tanks to guard. His retirement on Galadi was unmolested.

It was not realised at the time how dearly the enemy had paid for his victory, but I have the evidence of many Dervishes who fought against us that day that their losses were tremendous *Gough's Reconnaissance from Bohotleh.*

20. Meanwhile a movement of a similar nature to Cobbe's was being carried out from Bohotleh, under command of Major John Gough, whose orders were to move S.W. in order to collect information and stock. On the 22nd April, Gough, who had pushed ahead of his infantry with about 200 mounted troops, was attacked in thick bush near Daratoleh.

Action at Daratoleh.

After a seven hours fight conducted at the closest range, Gough managed to extricate his force and retire on Bohotleh. Our casualties were 6 officers out of 10 engaged and, 40 O.Rs out of 200. The enemy had again been very hard hit.

Mullah's Flight to the Nogal.

21. The actions at Gumburu and Daratoleh showed that the Mullah had reached the limit of his strategic retirement and was compelled to stand and fight in the neighbourhood of Wardair.

Unfortunately, owing to the breakdown of their transport, the Obbia Force could advance no further west, and the Abyssinians were urged to press the Mullah from the W. and S. W. But, before they could come up, the Mullah with all his followers and his stock dashed across our line 35 miles S. E. of Bohotleh, into the Nogal Valley. In order to avoid the greater danger he had exposed himself to the less.

Had a force moved out from Bohotleh, he would have had to stand and fight, but Colonel Swayne, who was in command there,

considered that he was not strong enough to risk it. Inasmuch as he had 1,100 men and 8 Maxims it is as hard to understand, as it is to excuse, his inertia.

22. It should here be recorded that there was no means of rapid communication between the three Columns, as wireless proved a failure.

23. By the end of June, the Obbia line was rolled up and the Obbia Force was concentrated at Bohotleh.

Thus ended the third expedition.

The fourth expedition.

Strategical Situation.

24. It was now decided to send reinforcements from Aden and India and General (afterwards Field Marshal) Egerton was appointed to the command.

25. The force now reached a total of 7,000 regular troops but the position was not a hopeful one. Our front was to a flank, with our base of supply at the extremity furthest from our line of advance, and there was no advanced base from which even a small force could operate. The Mullah, on the other hand, was so placed that he could await our advance, and then fight or decline to fight as he liked; for there was no containing force to keep him where he was.

The difficulty of containing the Mullah.

26. The big problem was :—"How is he to be prevented from going South? The obvious suggestion of landing a containing force at Obbia was ruled out of court owing to Italian objections.

Steps taken to do so.

The Abyssinians, on the other hand, agreed to come in again and to occupy the Southern line of wells, Walwal-Galadi-Galkayu. But they could not arrive for some time, and therefore we subsidized and supplied arms to the Sultan of Obbia on the condition that he should occupy Galkayu immediately while we ourselves established a strong post at Galadi and made a great show of landing troops at Obbia. Eildab was stocked as an advanced

base, but the bulk of the troops were kept well back on the L. of C.

The Mullah's Misconception.

27 The Mullah was deceived. He believed that his retreat to the South was blocked, and he had no idea of the strength of the force against him. Thinking that Galadi was our main army, and that Manning was at Bohotleh, he conceived the idea of cutting our L. of C. by an attack in the direction of Eildab, and to this end he concentrated 6,000 to 8,000 fighting men at Jidballi. He himself with most of his livestock remained in the Eastern Nogal.

Action at Jidballi.

28. Egerton concentrated his whole force and marched East, and on the 10th January was fought the action at Jidballi, in which the Dervishes were defeated with bloody loss.

The Mullah fled across the waterless Northern Haud towards Jid Ali, and a Brigade of Infantry and a mounted column were despatched to carry on the hunt in this district. But the Mullah was actively assisted by the Sultan of the Mijjertein, and their efforts were unavailing.

The Field Force was now broken up.

The Illig agreement.

29. In 1905, the Agreement of Illig was concluded, whereby the Mullah was assigned certain territories on the East coast of Italian Somaliland and promised to behave himself.

But he never abandoned his intention of ruling Somaliland, and, though outwardly pacific during the next three years, he was, in reality, busy consolidating his position.

1908.

The Renewal of Hostilities.

30. In August 1908 he apparently felt ready for another bout. In this month he wrote demanding, under threat of hostilities, the withdrawal of our Observation Posts in the Ain Valley. This letter was signed, "From one who is small and poor and a

coward and oppressed but who relies on God for blessing and victory." For a man with his record of murder oppressed is rather on pretty touch.

To accede to this impertinent demand was obviously impossible. The friendlies were terrified. The only troops in the country was the 6th K.A.R. The position was acute. A force was collected from Aden and the other African Protectorates and placed under command of General Gough and the Ain Valley was occupied.

The Ain Valley occupation.

Transport difficulties.

But, as so often happened in Somaliland, man proposed and Transport disposed. Local resources were inadequate, and Gough's requests for Camel Corps from India to enable him to move forward, were refused on the grounds of expense. And so for over a year the troops sat in the Ain Valley, and the Mullah remained at Illig.

Coastal concentration.

The lines of the policy.

31. Government now decided to try a new policy, the broad lines of which were as follows :—

1. To arm the friendlies so that they could defend themselves ;
2. To withdraw entirely from the interior to the coast, and to limit active administration to the coast towns.

The "bolt for the beach" was smoothly carried out. The local battalion, the 6th K. A. R., was disbanded, and 200 Indian Infantry were left for garrison duty at Berbera, Bulhar, and Zeyla.

The results.

32. The new policy worked out as everyone who knew the country must have known it would work out. The friendlies used the rifles and ammunition issued to them to fight each other, and made no attempt to combine against the common foe : while the Mullah moved into our Protectorate and proceeded to enjoy a

really good innings. By 1913 the male population of Somaliland had been reduced by one third, and the country, almost to within sight of the coast towns, was in a state bordering on anarchy.

The Camel Constabulary.

33. In order to maintain a semblance of order among our friendly Government sanctioned the raising of a Camel Constabulary, 150 strong, whose orders were to maintain peace within a radius of 50 miles from the coast, but on no account to engage Dervishes. A measure of order was restored, and the Constabulary gradually drifted beyond their 50 mile limit. In August 1913 the inevitable occurred. A Dervish force of about 2,000 rifles swept down the Ain Valley almost up to Burao, and lifted all the stock of our friendly tribes in this area.

Action at Dul Madoba.

The Camel Constabulary, under Corfield, moved out of Burao, and attempted to intercept the Dervish retirement at Dul Madoba. They inflicted heavy losses, but they were themselves practically annihilated.

The friendlies, now completely uncovered, fled towards the coast.

The Mullah took advantage of the general panic to push forward strong outposts to Shimberberris and Jidali, and he proceeded to consolidate his position by fortifying his Headquarters at Tale, and by the construction of blockhouses along the whole arc from Jidali to Galadi.

The Re-Occupation of the Interior.

The Camel Corps.

34. Government was forced to revise its policy, and it was now decided to occupy the interior as far as Burao with a Camel Corps, 600 strong, based on that place. By doing so we were at least protecting a small portion of our so-called Protectorate. In October 1914, the new Corps was ready to be "blooded".

Operations against Shimberberris.

35. In November '14 and February '15 operations were carried

out against Shimberberris by a Column composed of Indian Contingent, King's African Rifles, and Somaliland Camel Corps under Colonel Cubitt.

The object of these operations was to drive the Dervishes out of the Burdab Range, and thus free the rich grazing grounds of the Ain Valley to our friendlies; and this object was attained.

It was in these operations that we first found the enemy in blockhouse forts, and these set us a problem which we failed to solve up to the end. Their strength lay in the fact that, firstly the walls were constructed of large boulders and were 12 feet thick and therefore impervious to the fire of Pack Artillery; and secondly the only entrance was through a diminutive door commanded by, "Machicouli" galleries and flanking loopholes.

On the first occasion that we attacked, we tried a series of rushes, each more costly than the last; and failed. On the second occasion we bluffed the defenders of it with an obsolete old 7 pounder muzzle-loading gun, which had been ornamenting Berbera for some years. On the third occasion the enemy refused to be bluffed and treated the fire of this genuine antique with the contempt it deserved, and we eventually got in by exploding a charge of 100 lbs. of gun-cotton against the door. The placing of this charge would have been a costly business if we had not been lucky enough to find the soft spot of the "Machicouli" galleries with concentrated machine gun fire.

Spot 1915-1919,

36. The next item on the programme was an attack on Jidali, but at the last moment Aden got involved in a show of its own and could not lend us the extra troops required. From now onwards, our orders were to remain on the defensive, and the initiative passed to the enemy. I have not time to go into the various actions which took place between '15 and '19 and so I will deal with these events on general lines.

The position was as follows:—

(a) *Our own troops:—*

(i) *Regulars.* At Burao. The Camel Corps and one Company, Indian Infantry.

Somalland, 1884-1919.

At Lasdorch fort. One Company Indian Infantry.

At Berbera. One Company Indian Infantry.

At Laskhorai. One Company Indian Infantry.

(ii) *Somali Irregulars*. In fortified posts on the line An-khor Eildurelan-Wirir-Badwein and the Ain Valley.

Our Friendly tribes. Grazing their flocks up to the line of the Irregulars.

(b) *The enemy*.

(i) *Headquarters*. Tale, very strongly fortified.

(ii) *Garrisons*. In forts at Jidali-Barran-Urgal-Las Anod-Damot-Galadi-Wardair.

(iii) *Field Army*. Of varying strength and ever-changing location, with a roving commission to raid wherever and whenever opportunity presented itself.

Our system of dealing with these raids was as follows :—

If a small force came through, the Irregulars dealt with it on their own. If, as often happened, the enemy were out for a big thing and sent through 600-800 rifles, the job of the Irregulars was to get the news in to the Camel Corps at Burao as quickly as possible and to piquet the enemy till they came up.

The Irregulars were very stout fellows indeed, but they were very handy at sending up an S. O. S. and the Camel Corps was generally on the move. Sometime we got up in time; far more often we failed. But the enemy never got away with a really big thing and we gave him some bad knocks; and all the time he was losing men and firing away ammunition which he could not replace. We for our part were learning a great deal about country which white men had never trod, and we were learning a lot about the enemy. We found that he was now not nearly so formidable as the traditions of Gumburu and Daratolen had led us to

believe. Above a'l, those same Somalis, who had been condemned officially as unreliable material, proved themselves hard, brave, cheerful fighters ; and they established a decided moral ascendancy over the dreaded Dervish.

And now I will leave the story, with the stage set for the final expedition, about which Major Howard is going to lecture next week.

EDITORIAL NOTE.

The second lecture will be produced in the April Journal.

"THE FINAL PHASE OF THE WAR IN THE BALKANS".

LECTURE GIVEN AT THE STAFF COLLEGE, QUETTA, 14TH JUNE 1922.

by Major H. C. Ponsonby,
The Kings Royal Rifle Corps.

THIS lecture deals primarily with the operations of the last fortnight prior to the complete collapse of Bulgaria. In order, however, to understand better the situation at this period it will be necessary to run over a few of the more important events which have a bearing on the situation which we are going to discuss.

The study of any campaign in the Balkans is not made any easier by reason of the difficulties of following the course of operations on the map. Owing to the numerous languages spoken in the Balkan peninsula and to the one time Turkish domination over the whole no two maps agree as to which place names to use. For example if one should find Veles in the text it would not be easy to reconcile it with Koprulu on the map, or again Monastir with Bitolje or Bitolia.

The origin of the Salonika Army. (L' Armee de L'Orient).

You will remember that the Austrians after a considerable success early in the war were eventually counter attacked by the Serbs and sent flying back across the Danube with a loss of some 80,000 casualties in killed, wounded and prisoners.

The Central Empires, therefore, decided that this disaster must be avenged and, moreover, that the road to their eastern ally, Turkey, must be made secure.

For this purpose Bulgaria was approached, and on the understanding that the Austro-Germans should make a strong offensive from the north across the Danube, the Bulgarians agreed to attack from the east.

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On October 2nd 1915 the Austro-German Armies forced the crossing of the Danube and the Serbians were compelled to fall back southwards.

As soon as it became obvious that the Bulgarians meant to come in on the side of the Central Empires, the Allies decided, for political reasons chiefly, to send a force to Salonika.

The merits or otherwise of this action from the strategical point of view and the actual reasons which caused the decision do not form part of this lecture and so will not be discussed. At the end of the lecture a brief reference will be made to the actual results from the strategical point of view. I would, however, draw your attention to an American point of view as expounded by Colonel Sargent of the U. S. Army in his book "The Strategy of the Western Front 1914-1918."

The Allied action in sending troops through Greek territory actually constituted a breach of the neutrality of that country. The excuse given for our action was that although Greece could not see her way to support her ally Serbia, she would certainly not have the face to put any obstacles in the way of the Allies sending help through the only possible route, Salonika.

On October 5th 1915 the first units of the Allied Army, a French Division, landed. This was followed shortly by the 10th British Division from Gallipoli and other French and British Divisions as soon as they became available and could be transported. On account of the mountainous nature of the country and the lack of good roads these divisions were placed on a combined pack and wheel basis so far as their transport was concerned.

The operation, ostensibly for the purpose of threatening the left flank of the Bulgarians and so holding them in check sufficiently long for the Serbian army to fall back and get into touch with the Allies, was from the first doomed to failure on account of the factor "Time".

Before a force, sufficiently large to make itself felt could be assembled, the Serbian army had, for the time, ceased to exist. Attacked in front and flank these gallant soldiers, sooner than

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surrender, retired bit by bit into the mountainous country of Albania and Montenegro and a few succeeded in reaching Monastir. For a time we will leave them there toiling through the snow clad mountains without guns, ammunition or transport, almost without food, but with their spirit unbroken.

In the meantime let us look at the progress of the Salonika Army. Greece at this moment was like a house divided against itself. Her King, with his German wife, appeared to have pronounced Germanophil tendencies whilst the other party led by Venizelos urged immediate entry into the war on the side of the Allies. "Greece" said Venizelos "is far too small a country to commit so great an infamy as the desertion of her ally Serbia." A fine sentiment but it did not prevent the desertion.

The facts of the more secret intrigues of diplomacy are always difficult to come by and I do not know whether the real truth of the doings of the Greek Court during this period have ever satisfactorily found the light of day.

What the true reason was which prevented King Constantine from showing his hand openly is not yet clear.

It may have been that he could not get a good enough bargain out of the Germans for his services; it may have been the fear of the British fleet, for Athens is very vulnerable from the sea; or it may have been that, shrewd man as he undoubtedly was, he was not yet wholly convinced of an ultimate German victory. Suffice it to say that when the Germano—Bulgar armies arrived on the frontiers of Greece, having driven back the weak Allied forces, they came to a halt and dug themselves in.

The situation in Salonika was very difficult for the Allies. Nominally a neutral country, they could not deal as drastically as they wished with the innumerable spies who openly infested the place. One could see them notebook in hand watching the troops disembarking on the quays.

Not the least dangerous amongst them were the women who haunted the cafés and passed on what information they could get out of indiscrete officers to the German spy centre.

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On December 15th 1915 the enemy made an air raid on Salonika and thus gave to the Allies the excuse of considering the place no longer neutral. All enemy consulates were expelled at once and with them went most of the spies.

On June 1st 1916 the Greeks, by King Constantine's order surrendered Fort Rupel, the key to the Struma Plain, to the Bulgarians.

In August Kavalla and the greater part of the Macedonian Army Corps were surrendered in a similar way. Colonel Christodoulos, however, with the greater part of his division refused to surrender and escorted by a French warship, escaped to the Island of Thasos and arrived a few days later amidst scenes of great enthusiasm at Salonika.

Venizelos now left Athens and on October 9th arrived in Salonika.

In November an ultimatum was sent to King Constantine requiring him to disarm. This expired on December 1st and a party of marines was landed at the Piraeus by way of a show of force, but were fired on and compelled to retire.

By way of apology King Constantine was made to hold a parade at Athens in which his troops marched past and saluted the Allied flags.

About this time things were going badly for the Allies on the Roumanian front, so King Constantine continued to persist in his treacherous tactics in the hope that Germany would still be able to come to his help.

On December 14th the Allies took up a firmer attitude and ordered Royalist Greece to withdraw into the Peloponese.

In June 1917 we found it necessary to occupy certain points in northern Greece in order to safeguard our communications and also to secure the valuable crops in the plains of Thessaly. We also seized the Isthmus of Corinth.

On June 10th a polite but firm note was handed to King Constantine with the intimation that there was an Allied warship

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waiting off the island of Euboea ready to take him to any place he might wish to go to.

The following day he departed and Venizelos shortly afterwards returned to Athens. After an election which ended overwhelmingly in favour of Venizelos, Greece formally came into the war on the side of the Allies.

The reconstruction of the Greek army now started and excluding the National Divisions already in the line the first new divisions were ready in April 1918. By the time of the final offensive there was a total of nine divisions available.

In the meantime both armies had been consolidating themselves more or less on the line which we are about to discuss.

From the Aegean to the Vardar there had been little or no change nor was there as far as the summit of the Mala Rupa west of the Vardar.

From this point to Lake Okhrida there had been a good deal of moving backwards and forwards. Both sides were feeling for the flank whilst from the Allied point of view so long as this bit of country remained in the hands of the enemy the road was open for the emissaries of Germany to carry on intrigue in Athens.

In November 1916, therefore, General Sarraïl, who had always considered this flank the enemy's weak point, undertook an offensive in this direction.

Monastir was recovered and several positions of importance were seized and held amongst the Heights of Kaimachalan but the offensive was brought to a standstill immediately north of the town.

Our line, however, now had its flank resting securely on lake Okhrida. The tendency on both sides was to stretch out westwards and so with the Italians based on Valona and Santa Quaranta and the Austrians on Durazzo the line eventually stretched from sea to sea.

In Albania owing to the indifferent communications the line was not so continuous as in other parts.

We left the Serbians at the end of 1915 falling back onto the Adriatic.

Temporarily rendered hors-de-combat, they were destined to rise again and under the command of their General Mitchich, to take a leading part in the destruction of their enemies. On 11th January 1916 the Allies determined to occupy the island of Corfu and there re-organize the Serbian army.

Greece was accordingly so informed.

Amongst other places the Kaiser's Palace, the Acchileion, was seized and turned into a hospital.

Gradually the Serbians were shipped from different points on the coast of Albania and Montenegro and assembled in Corfu where they were clothed and equipped. The French also took some of them to North Africa.

As soon as they were ready they were shipped round to Salonika where they took their place in the line in front of Monastir.

Considering the proximity of the Austrian naval base of Pola the transfer of the Serbian army from Albania to Corfu and from there to Salonika was no mean feat and furnishes a striking example of the value of command of the sea if any further example were needed.

We will now pass over the weary months of waiting with their raids and counter raids all along the line, none of which very materially altered the situation.

A few of the larger ones made with the object of gaining good jumping off places were of considerable interest.

One especially made with the double object of gaining a good jumping off place and of testing the newly arrived Greek units is worthy of mention.

Carried out on the Skra-di-Legen in May 1918, the Greeks went forward with wonderful dash and carried all before them.

In fact it was not until they got into their own barrage that they could be stopped. In this action the Greeks took about 1500 prisoners.

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It was of interest, however, for another reason for it furnished the first definite evidence of the low moral in the Bulgar army on a large scale.

A counter attack was ordered and after a heavy bombardment the barrage lifted and the Greeks stood to to repel the attack but nothing happened. The Bulgarian infantry had refused to go forward.

Description of the lines.

"A" Allied.

Starting from the Aegean on the right the Allies held a bridgehead over the Struma near its mouth at Neohori. Along the southern shores of Lake Tahinos was a chain of posts for the purpose of preventing spies etc. from passing through our lines.

From the N. W. end of Lake Tahinos the line followed the foot-hills round to the S. E. shore of Lake Doiran.

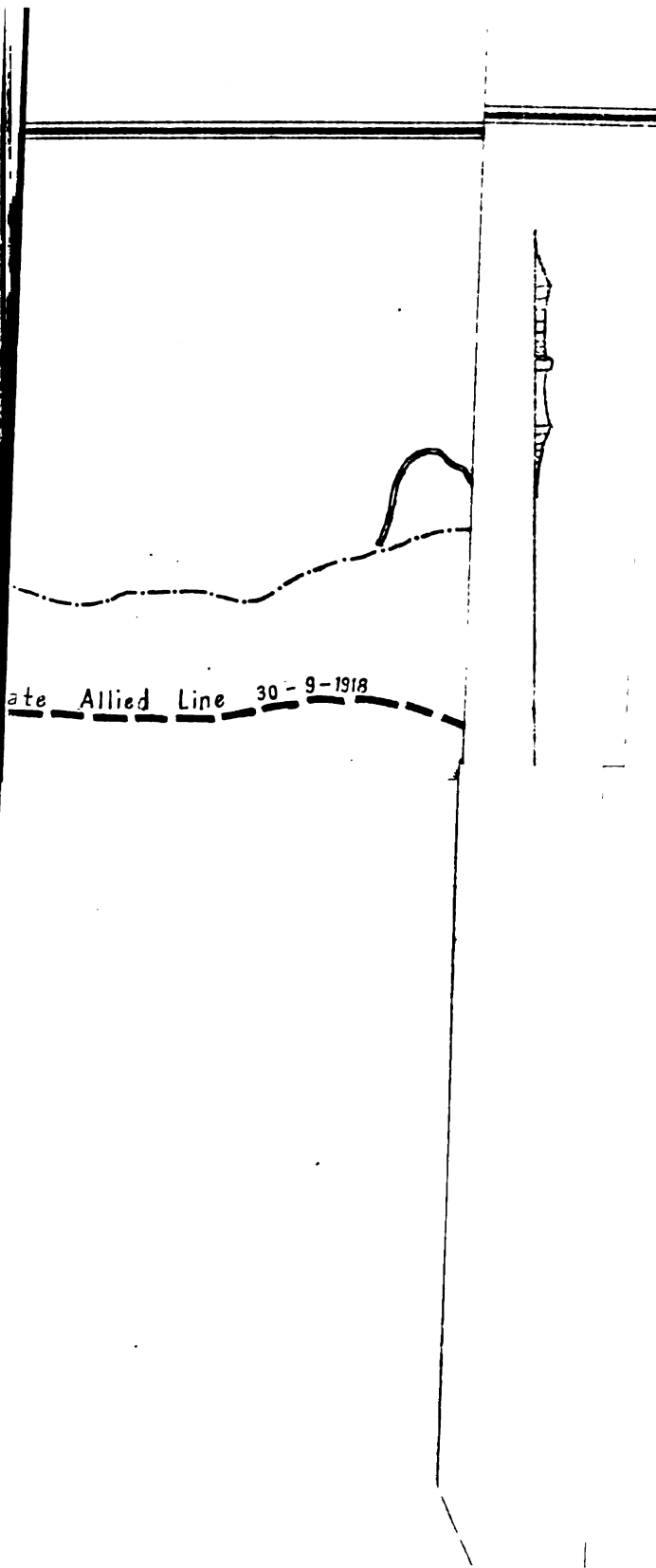
Taking off from Lake Doiran immediately south of the town of that name it ran along the spurs of the Grand Couronne and the Dub and thence south westwards across the plain to the Vardar immediately south of Guevgueli. From here it ran along the northern slopes of Mayadagh and onto the lower slopes of the heights of Mala Rupa and Dzena.

Gradually creeping up the side of the mountains it crossed the summit at the heights of Kaimachalan and passing a few miles north of Monastir rested on the shores of Lake Okhrida.

From Lake Okhrida it passed more or less westwards to the Adriatic near Fieri.

Of this the Struma mouth was strongly held whilst between lakes Tahinos and Doiran it consisted of strongly fortified posts connected by continuous wire the posts being rather more numerous in the neighbourhood of the Serres road.

From Doiran to the Vardar there was practically a continuous trench except for a small part of plain east of the Vardar. West of the Vardar for three or four miles it was again fairly continuous.



A hand-drawn map on a piece of paper with a vertical fold. At the top, there are two horizontal lines. A vertical line runs down the right side of the page. A dashed line, representing a front line, runs horizontally across the middle. Above this dashed line, there is a wavy line with a small peak. To the right of the vertical fold, there is a small, irregular shape. The text 'ate Allied Line 30-9-1918' is written along the dashed line.

ate Allied Line 30-9-1918

and then until near Monastir it was once more held on the principle of strong points.

Before Monastir it thickened up once more thinning out as it approached lake Okhrida.

From Okhrida to the Adriatic it was practically a line of outposts thickening up again near the sea.

A total line of approximately two hundred and fifty miles.

"B." Enemy.

The enemy line ran more or less parallel.

At the Struma mouth the lines were fairly close together but between Lake Tahinos and Doiran the enemy line fell back by Serres, Rupel and the Belashitza Mountains.

From Doiran to the Vardar they held the heights of the Grand Couronne and the Dub, where they dominated our lines at close quarters, and the crest of the hills running west to Guevgueli.

From here westwards their line ran parallel to ours at varying distances according to the amount of command the terrain permitted.

It will be seen that generally speaking the trenches were a considerable distance apart except from Doiran to Guevgueli where they were hard up against one another, especially so at Doiran. Everywhere, however, the enemy had the command of us either as the trenches lay or should we advance to the attack.

Communications.

"A." Allies.

The communications of the Allies radiated from Salonika.

So far as they went they were comparatively good though far from being on a level with those of the western front.

The Struma mouth and the Tahinos lake sectors were fed by a railway line running south of the Besik Lake to beyond Stavros; also a good deal of help was given by the Navy who could disembark stores or men at Stavros if necessary.

What was generally called the Struma Front was fed by the Serres road, a good broad metalled lorry road.

The Mountain Sector of the British Front (The Krusha Balkans) was supplied by a fair cart road branching off from the Serres Road and by a light line up to Snevce.

From Doiran to Guevgueli the main railway lines duplicated by good roads made the supply of this sector easy.

From west of Guevgueli to Lake Okhrida the Salonika-Monastir Railway and road supplied the line.

Beyond Monastir part of the line was supplied by road from Florina and the remainder from Valona or Santa Quaranta.

"B" Enemy.

The enemy's main lines of communication were,

1. Railway from Adrianople to Serres. This could be threatened from the sea near Dedeagatch.
2. Sofia to Rupel by good road and light railway along the Struma Valley.
3. Uskub to Guevgueli broad gauge railway and road.
4. Veles to Monastir road, also the light railway from Grads-ko to Prilep.
5. Kalkaldelen to Monastir, road.
6. Durazzo southwards by mountain roads.

He had good lateral communication between the Struma and Vardar valleys behind the Belashitza Mountains, a through route by road and a light railway from the Struma Valley to Strumnitza.

The Positions of the opposing Armies.

Available information as to the exact distribution of the armies is rather inaccurate and no two accounts agree as to details. Broadly, however, their distribution was as under,

"A" Allies.

From Neohori to slightly west of Butkova stood three Greek divisions. On their left and stretching towards Lake Doiran came the 228th British Brigade. Thence to about three miles west of

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the Vardar stood in order the 28th, 22nd, 26th and 27th British divisions, the latter being west of the Vardar.

In addition the Greek Cretan and Serres divisions were behind the Doiran sector.

To the left of the 27th division was the Greek Archipelago division and one other and then the 16th French Division.

More to the west and opposite the point selected for the attack were the 17th and 122nd French divisions and the six divisions of the Serbian Army.

Next came the 11th French and 3rd Greek divisions with a strong Italian division opposite the famous Hill 1050 in the Tcherana Bend. Facing Monastir were the 57th, 30th, 76th and 156th French divisions with the Greek Evzones of the 3rd Division holding the ground between Lakes Prespa and Ohrida.

From Ohrida to the sea were about 30,000 Italians in regimental and brigade organizations.

'B' Enemy.

From the Aegean to the western end of the Belashitza Mountains the IV and II Bulgarian armies, about 70 battalions in all.

From the latter point to about the summit of Mala Rupa the I Bulgarian army, 65 Battalions.

From there to Lake Ohrida the so called XI German Army, 120 battalions. This army had very few German units but the command and Staff were German.

Thence to the Adriatic about 40,000 Austrians facing the Italians.

See also appendix "A".

Moral Factors.

Though the Bulgarians as a whole had gone into the war with rather luke-warm enthusiasm, they had become much more enthusiastic after the swift victories of the early stages. The population, mostly agrarian, were getting good prices for their produce and were not being much affected by the war. Now, however, their eyes were beginning to open.

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At first not understanding why, when so signally victorious, the war could not be satisfactorily concluded they were beginning to realize that it was Germany's battle they were fighting and not their own.

They saw that they had nothing more to gain and in fact everything to lose if Germany went under. They hated the domineering methods of the Germans, desertions increased and cases of indiscipline by whole units became frequent.

The outlook on other fronts had now ceased to be promising. Turkey had been beaten before Jerusalem and in Mesopotamia, Austria had failed at great cost on the Piave and Germany herself was in sore straits on the western front.

While nearly all the Germans and most of the Austrians had gone to defend their own countries the Greeks were coming into the field in ever increasing numbers and in the west the Americans were pouring over.

In short, complete war weariness pervaded the country and it was reasonable to suppose that a decisive break through might bring about a rapid debacle.

The Allies on the other hand were at the top of the wave. On every front things were going well for them and, moreover, they were conscious of the enemy depression.

There was no lack of stores or food and even in this heterogeneous army there was more or less complete accord.

The Serbs especially, urged on with the hope of revenge and the deliverance of their country, were confident that their hour had come.

On the other hand many of the Allied units, especially the British, were weak from fever and influenza but this latter scourge had also taken heavy toll of the enemy.

As an example of the wastage caused to the Allies, chiefly through malaria, during the first year of the war in the Balkans the British army alone evacuated 25,000 men overseas from this cause. Later the submarine pressure made evacuation from the

country difficult and so convalescent camps were formed to which the patients were sent and thence back to the line, but so long as they remained in the country they never got thoroughly cured.

In September 1918 when the final offensive took place the total hospital population of the Allies in Salonika, including hospital staffs, nurses, etc., was about 200,000.

In spite of this, from the moral point of view, the time seemed well chosen for an offensive.

Strategic Considerations.

Whatever the subsidiary objectives may have been, the liberation of Serbia, the occupation of Bulgaria, the severance of the German communications with the east there was, of course, only one way of achieving any of them and that was by the destruction of the enemy's army in the field.

Where, then, was the bulk of his army to be found?

In the Vardar Valley and north of Monastir.

To launch an attack between the Algean and the Rupel Pass would achieve nothing.

To force the Rupel Pass and try and turn his flank by way of the Belashitza would be risky, costly and not promising of success.

Frontal attack between Lake Doiran and the Vardar would merely be pushing him back on his lines of communication, moreover, it would be extremely costly.

The attempt to turn his flank at Monastir had failed once all ready; moreover it meant moving a large part of the army along lines of communication parallel to the front and dangerously close to it, and inviting attack on some part of the line which had been weakened to supply the assaulting divisions with the danger of being cut off from our base.

The remaining alternative was the plan of the Serbian Commander-in-Chief and was concurred in by General Franche D'Esperey.

General Mitchitch advocated an attack on the Dzena-Dobropolie Massif where the enemy, trusting to the enormous natural

difficulties, were holding it fairly lightly. Again they could not reinforce this sector very rapidly.

General Mitchitch, however, felt confident that his own army, accustomed to working in the hills, could break through and if successful could push on to the north and north-west cutting the communications of the main masses of the enemy in the Vardar Valley and behind Monastir.

If this movement were successful the complete capitulation of the XI German Army would be almost assured whilst the position of the first Bulgarian Army would be far from pleasant.

This, then was the plan which was eventually adopted.

The Offensive.

Owing to the good observation which the enemy had all along his line it was no easy matter to bring about the concentration as a surprise.

One small point which helped us was that the enemy had caused rumours to get about that he was going to make an offensive himself. This idea was well fostered in Allied circles with the result that our subsequent feverish activities in our back areas probably induced the enemy to think that we had swallowed the pill.

Later when it was no longer possible to hide the fact that we were going to take action somewhere we kept him guessing as to the actual point of attack by rails all along the line.

In the Struma Valley the Greeks occupied what might have been a kicking-off place for an attack. Similarly the 27th Division captured the position of Alchak Mahale and held it against counter attacks.

In order to suggest further the Vardar as the point of attack numerous dummy bivouacks were put up in that area and fires kept burning in them,

Many of these were shelled to the amusement of all, except the caretakers appointed to look after them.

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One point in the plan was of vital importance, the necessity of holding the Bulgar reserves in the Vardar Valley and preventing their movement to the west until the Serbian break-through should be complete.

To ensure this it was arranged that in the event of the Serbians and French gaining a promising initial success, there would be a British-Greek attack on the Doiran Front.

This was probably the most formidable position on the whole front but in order to ensure the success of the whole strategic plan something of the kind was necessary.

On September 14th the bombardment started on the front from Doiran to Monastir a distance of about ninety miles. At dawn on the 15th the Serbians and French assaulted and after stubborn fighting breached the first and second lines on a front of about nine miles. At the same time the Greeks demonstrated in the Struma plain by pushing forward about three miles on a front of nineteen.

On the 16th the breach was widened to sixteen miles and a depth of five-and-a-half.

By the 17th the break-through was twenty-two miles wide. The initial success having been achieved, the attack on Doiran was ordered for the 18th.

Although, this attack failed to actually break through, very heavy loss was inflicted on the enemy and he was compelled to throw the reserves remaining in the Vardar Valley into the fight.

The detail of the fighting on the Doiran Front is a story in itself and cannot be gone into here but, as an example of the stubbornness of the fighting, it may be mentioned that the 7th South Wales Borderers came out of the fight with one wounded officer and nineteen unwounded other ranks.

The Serbs had now got a footing across the Tchernia and enemy resistance was breaking down all along the front of the main attack,

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By the evening of the 21st the Serbs advancing northwards had cut the enemy's communications in the Vardar Valley at Negotin and also the Gradsko-Prilep light railway. They were also approaching Prilep.

The hope for situation had now been achieved, the position of the XI German Army was almost hopeless whilst the I Bulgarian Army had no choice but to retire before it was too late.

On the night of the 21st it became obvious that the enemy were in full retreat from Doiran to Monasir.

In the Vardar Valley dumps were on fire in all directions and huge explosions began to take place soon after dark over the whole area.

Orders were now received for the 27th Division to move forward at day-break in conformation with the Greek Archipelago Division on their left and press the enemy rear guards.

After years of trench warfare, we had been looking forward to a vigorous pursuit but in accordance with the general plan it was necessary to conform to the wheel of the Greek Divisions on our left, and so to our sorrow on the morning of the 22nd we saw our enemy slipping away from us.

If the pursuit on this sector was dull that on the Doiran sector was more exciting whilst the Serbs went forward remorselessly.

The enthusiasm in the liberated Serbian territory was wonderful to behold. Gangs of women foraged the country all day long and brought food into the Serbian bivouacs at night, so that they should not have to wait for the transport which they had far outstripped in their advance. Other parties of women could be seen marching alongside the columns with a shell under each arm so that the guns should not go short of ammunition.

Driven from its communications in the Vardar Valley the only line of retirement remaining to the I Bulgarian Army was over the Kosturino Pass and *via* Strumnitza and Petric to the

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Struma Valley and so northwards through the narrow Kresna Defile to Sofia.

The tremendous congestion caused by the retiring Bulgars in the Kosturino Pass was an opportunity not to be missed by the Air Force. With their aerodromes less than thirty miles from the Pass, they spent the day going backwards and forwards and turned the place into a veritable shambles. Guns, horses, wagons, lorries and men lay in every direction.

On the 25th there was a certain amount of rear-guard fighting near the Kosturino Pass, but this was carried and at the same time the formidable heights at the western end of the Belashitza Mountains were stormed; and the Greeks and British, under General Milne, wheeled to the right and moved down the Strumnitza Valley towards Petric and the Struma in order to cut off the III and IV Bulgarian armies in the Struma Plain. A left flank guard was directed on Pechovo.

On the 26th there was rear-guard fighting towards Petric.

On this day the Serbs reached some ten miles north of Istib, arrived before Veles and occupied Krushevo half way between Prilep and Kicevo. On this day also Bulgarian parlementaires came into our lines under the white flag to seek an armistice.

At midday on the 30th the Armistice came into force. The Rupel Pass was almost in our hands, Pechovo was occupied and the Serbian cavalry was thirty miles north of Istib.

Uskub had been occupied as also Kicevo and Struga and from Okhrida to the Adriatic the Austrians were in full retreat.

Our airmen were repeating in the narrow Kresna Pass what they had done at Kosturino.

Although the terms of the Armistice did not demand the actual surrender of the I, II and IV Bulgarian armies, or rather the remnants of them, the so-called XI German Army became prisoners of war.

The total captures amounted approximately to 100,000 men and 2,000 guns.

Results.

Had the war gone on for any length of time after the conclusion of the decisive campaign in the Balkans, it would have been interesting to study the effect on the war, as a whole, which the success in this quarter would have had. At the time the apparent gains were pretty considerable. Namely, the liberation of Serbia and Montenegro, new threats to Austria and Turkey, the freeing of Roumania and the severance of Germany's communications with the east.

In actual fact the pursuit of the remaining Austrians continued through Albania, Serbia and Montenegro and further large hauls of prisoners and material were made.

By the end of October the allied armies stood as under. On the right the I Hellenic Corps stood in echelon between Drama and Kavalla ready to advance on Constantinople. Two British and one French Division were on the Maritza from Ipsala to Adrianople, the bridge head at the former place being already in our hand.

The French and Serbians had reached the Danube from Widin to Belgrade.

Further to the west the II Serbian Army was on the Bosnian frontier and at Ipek and Podgoritzta in Montenegro. The Italians had cleared Albania and entered Scutari. Two British brigades were on their way to the Black Sea and Danube ports and to show the flag in Roumania.

As to the importance which the Germans put on the rupture of the Balkan Front, one may quote the actions of Hindenburg and Ludendorff and the subsequent action of the German Government on account of their opinions.

On September 28th Ludendorff knew that Bulgaria was finished and sent to Berlin to advise an immediate request for an

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armistice, On October 2nd he appeared himself before the leaders of the Reichstag.

On October 3rd Hindenburg appeared and in a signed statement said, "As a result of the collapse of the Macedonian front and the weakening of the reserves in the west which this has necessitated, and in view of the impossibility of making good the very heavy losses of the last few days, there appears to be now no possibility to the best of human judgment of winning peace from our enemies by force of arms."

On October 4th Germany proposed an armistice.

The main lessons which we learn from this campaign are :—

- (1) Time as a factor in war. The failure of the Allies to arrive in time to save Serbia in the first instance. The cause of this was largely Germany's position of interior lines.
- (2) Value of command of the sea. The transportation of the Serbian Army.
- (3) Moral. Value of good moral to the Allies and *vice versa*.
- (4) Striking at communications. The cutting of the lines of communication in the Vardar Valley and at Prilep.
- (5) Surprise. Success of the concentration at the decisive point without the enemy finding out.
- (6) Concentration of superior numbers (*vide* Appendix "A") at the right time, at the right place and with superior moral.
- (7) The value of aeroplanes in the pursuit especially where lines of communication are congested as in the Kosturino Pass and the Kresna Defile.

APPENDIX "A".

I. Approximate relative strength of the opposing armies in September 1918.

Macedonian Front Proper	Allies.	Enemy.
Battalions	289	263
Guns	2069	1850
Squadrons Cavalry	47	26
Aeroplanes	200	80
Albanian Fort, (Okhrida to Adriatic.)		
Organized in Bdes. and Battns.	30,000	40,000
No. of guns not known.	(Italians,)	(Austrians.)

II. Approximate relative strength at the point of attack by the Allies.

	Allies.	Enemy.
Battalions	75	26
Guns	586	146
Squadrons Cavalry	18	?
Aeroplanes	81	24

III. Strength of the Serbian Army at different time —

On first mobilization	650,000
After reorganization at Corfu	120,000
In final offensive	70,000

IV. A few figures relative to the British Salonika Army, September 1918.

Ration Strength	177,865
Fighting Strength	50,000 to 60,000
Infantry Trench Strength	25,000 to 30,000
Sick in hospital at one period of the month,	20,000

V. Admissions to hospital in the British Salonika Army on account of Malaria.

1916	29,594
1917	63,396
1918	67,059

AN ASPECT OF THE GROUP SYSTEM

By a Regimental Officer.

THE "Depot" system was obviously doomed owing to its inadequacy during the Great War. Its place has been taken by the "Group" system, akin to the system at home, under which Battalions have been formed into Groups each with a Training Battalion where the recruits and reservists of the whole Group undergo their training, and which will, in time of war, absorb what would have been the depots of Battalions proceeding on service.

The benefits of this scheme from the training and administrative point of view are obvious, and it has the further advantage of facilitating internal security. It has raised many minor difficulties, chiefly of an administrative nature, as a new scheme is bound to do. These can nearly all be settled by cooperation between the Officers Commanding Active and Training Battalions. It is not intended to enumerate them in this article, but only to touch on those which bear on what is, in the writer's opinion, the fundamental question raised by the whole scheme, and one which is giving many regimental officers furiously to think at the present time. It is "Is the regimental officers teaching and propaganda to remain as it was in the past directed towards the attainment and maintenance of the Battalion spirit or is a group spirit to be the ideal of the future". It is "esprit de Battalion" versus "esprit de regiment", and it must be realized that we cannot attain the latter except at the expense of the former.

If training Battalions are to be regarded as more a collection of depots than as a unit in themselves, the identity of each active Battalion being preserved as far as possible in its Company with the Training Battalion, and if Battalions are permitted to retain their present identities, by which is meant a great deal more than merely names and numbers, transfer of both men and officers

An Aspect of the Group System.

being reduced to a minimum, then "Esprit de Battalion" will remain our watchword and "Esprit de regiment", though it will exist and increase slowly, may be regarded as subsidiary.

If on the other hand units are to sink their own identity in that of their Groups, and the Group is to be regarded as one regiment, as at home with officers and men perculating throughout it and frequently changing from one Battalion to the other, then the Battalion Spirit must suffer and we must begin to do everything in our power to fill the gap by the inculcation of the Group Spirit, at the earliest possible moment.

The orders so far issued appear to leave the matter open to discussion but tend more and more towards the latter alternative. The impression given is that it is intended finally to adopt the Group system, and consequently the Group Spirit, in toto, but the authorities are loth to force it down throats, willing or unwilling, all in one gulp.

The Indian Army Officer is notoriously conservative and adopts a cautious obstructionist some call it—attitude towards anything new. The reason for this is that he is living in close contact with and commanding a special type of man whose ideas and outlook on life are very different to his own, but whom he feels he knows far better than anyone else. It takes him a comparatively long time to gain the confidence of his men but when he does gain it he gets with it a degree of intimacy probably unknown in any other branch of service. This does tend to get him into a groove, but if he hates being jolted out of it he must be given the credit of unselfish motives in doing so, for he is doubtful as to how any unknown quantity will react on the welfare of the difficult and inflammable material of which he is in charge.

So it is in the present instance. The Indian Army Officer in the past regarded his Battalion as his permanent home. He was born and bred, in the Military sense, on the Battalion spirit and has seen that his men were similarly brought up. He has tested this spirit in war and found it good, and he believed that it is this spirit alone which has brought the Indian Army with so much credit through the equally trying, and morally more dangerous, time since peace was declared.

There are therefore many who regard the possible substitution for this spirit of the wider but less readily obtainable "esprit de regiment" with some misgivings. They cannot help feeling that the immense value of the Battalion spirit as it now exists is not sufficiently realized, and that to run the risk of decreasing it with the object of attaining the larger ideal of the group spirit, would be to exchange the substance for the shadow at a time both difficult and dangerous.

Let us examine briefly the chief facts and possibilities of the new scheme which give rise to these feelings of nervousness by detracting, potentially at any rate, from the old Battalion Spirit, *Recruiting*.

By classing them according to the reasons which bring them to enlist, Indian Infantry recruits may be divided into 3 main categories.

- (1) Those who enlist through a spirit of adventure and because they are "fed up" with their home life. Their number are comparatively small and they are usually short service men who cut their names when their original engagement expires.
- (2) Those who come to the Army for the pay pure and simple, the regiment in which they enlist being more or less immaterial.
- (3) Those who enlist in a certain specified unit because their relations and friends are already serving in it.

To this must be added one other during the war, namely those who enlisted because they were unable to resist the persuasion and pressure brought on them to do so. These included many men of classes not previously enlisted in any numbers in the Army. Some of these did well, and their representatives have remained in the Army. The remainder disappeared en masse with the mustering out rules.

The third category are the most numerous and form the backbone of the rank and file of the Indian Army. They are easily the best and most loyal soldiers both in peace and war. If recruiting in the future is to be for a group and not for a unit these men will

not be forthcoming in the same numbers, unless special measures are taken to get them. They will not enlist in a Training Battalion as such, but they will enlist in a special Company of a Training Battalion if they know for certain that by doing so they will eventually get to the Battalion they want and to which this Company belongs.

Units find that men from certain districts or parts of districts, in which they have a good connection, make the best soldiers in their particular unit and are naturally apt to specialise. This undoubtedly caused an immense waste of power in the early years of the Great war. Recruiting arrangements were not sufficiently organized and a veritable scramble ensued. Districts already over-recruited were swamped with recruiting parties, while other areas were hardly touched, and the numbers of recruits obtained were often in inverse ratio to the strength of the parties sent out to enlist them. Later the Civil did more and the Military less and recruiting returns improved. It is presumably to avoid a repetition of this muddle under similar circumstances in the future that orders have recently been issued that units must not confine themselves to certain areas but must be prepared to take men of certain classes they enlist wherever they may reside. Presumably then, to take one instance, the Punjabi Muhammedani of Lahore is in future to be enlisted and to serve side by side with the Awan from the Salt Range and the Panjuha of Kahuta, though the P. M. of the Sikh country differs from his cousin North of Jhelum as chalk from cheese. This may be an excellent order for the next war but, if enforced, it is a direct blow at the "esprit de Battalion" of the present time. Is it not obviously swinging the pendulum too far the other way? Cannot some compromise be arrived at which while making adequate provision for recruiting in the next war, will permit of Units or groups specialising to a modified extent in the classes and districts by which they set so much store?

There must be statistics shewing the numbers of men enlisted during the war from each district or thana under their various classes. Figures are easily obtainable to shew the numbers at present serving, as are also the opinions of units as to the value

of the various classes from each area as soldiers. If there are only a small percentage now serving from areas which were opened up for the first time in the war it means one of two things. Either the men of that area do not want to serve, or units have no opinion of their martial qualities. In either case they are better left alone.

From the above statistics it should be possible to apportion out the country in small blocks to units for recruiting purposes. By this it is not meant that any one unit should be given complete monopoly of any one district, but that recruiting from small areas, sometimes single villages or group of villages, should be confined to a few units who already draw on them largely for their men. The selection for each unit should be made as large as possible so that even if the whole area was not used in peace time it could be tapped in war. Perhaps an example will make this clearer. A unit enlisting P. M's. might have but few from Gujranwala District, which proved a fruitful source of recruits in the late war but might be given a small area in that district which it could, tap in war if necessary with the aid of the Civil. Emergency Regulations in war for safeguarding the interests of the men by a system of promotions according to the numbers enlisted from the district could be framed if necessary.

In allotting areas Commanding Officers should be asked to state clearly what they want, and precedence should then be given to the units who already draw the most men from them. Recruiting Officers could then submit periodical reports, in consultation with Officer Commanding Units, as to how the scheme was working, with their recommendations regarding the extension or reduction of any units' areas. Such a scheme would facilitate enormously the working of the Civil recruiting machinery on the outbreak of war. Now that the class composition of all units in their respective groups is more or less the same, this allotment, if made by Groups instead of Units, might be of considerable assistance in spreading the group spirit, without in any way injuring the regimental spirit. And is it being too optimistic to hope

that this spirit might in time react beneficially on the little group colonies in the districts? This personal element, which it has been stated is the main factor in bringing the best recruits to enlist, is one of the guiding principles throughout the sepoy service. Leadership and command with him are very largely personal questions. This is a fact which must never be lost sight of for on it has been built up the Regimental Spirit of the Indian Army. On this personal element hinges all discipline, which can never be of the rigid type prevailing in the British service. The ideal to be aimed at is the same in both cases, but the methods of attaining the ideal must differ almost as widely as the mentality of the two races. It is not overstating the case to say that the fact that his "Sahib" and his friends in the regiment will be angry with him, if he commits one of the Military crimes dear to his heart, is a much greater deterrent to the average sepoy than the fear of punishment. This personal element is bound to decrease if each group is to be regarded as a Regiment with the constant transfers of officers and men this will entail, however beneficial such a system may be in other respects.

To sum up the above remarks. The group system is excellent in theory. In practice it undoubtedly has many advantages, both from the training and administrative point of view. But if carried out in full each Group being regarded as one Regiment, and Battalions sinking their own identity in that of their Group, then the Battalion Spirit, at present the greatest asset of the Indian Army, will be affected adversely. This may be only temporary, and the gap left by the decrease in Battalion Spirit may in time be filled by the higher but more mythical ideal of "Esprit de regiment". During the transient period the loyalty of Indian troops, which depends almost entirely on the esprit de Battalion, may suffer.

On the other hand it appears possible to obtain most of the administrative advantages of the system, while retaining the ideal of "esprit de Battalion", if Units are permitted to retain their old identity in every possible way. To do this it is necessary to regard Training Battalions more as collection of depots than as

units in themselves, the men of each Company, realizing that they belong definitely to one Battalion of the Group rather than to the Group as a whole. This appears to be quite feasible since Training Battalions will presumably never take the field as complete units. At the same time everything should be done to lay the foundations of a Group Spirit, which would become more real and less theoretical as time went on. Until this has matured however the retention of the present "esprit de Battalion" is so essential that it appears most inadvisable to risk sacrificing the least portion of it for any advantages in other directions, or for any scheme however good in theory.

NOTES ON WORKING FOR THE EXAMINATION FOR ADMISSION TO THE STAFF COLLEGE.

By

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PART I. GENERAL.

I. INTRODUCTION.

THESE notes are written with the object of assisting officers who intend to present themselves for the examination for admission to the Staff College. The notes are the result of experience in working for and doing the examination, but the writer does not claim that they are infallible, nor that better advice on working for the examination could not be given. His experience, however, leads him to believe that many officers waste valuable time when preparing themselves for this examination, firstly, through not fully realizing the best way to set about the work, and, secondly, through doing much unnecessary work. It is with the object of assisting the average officer who, alone and unaided, desires to prepare himself for the examination that these notes are written. Officers who are in a position to obtain expert advice and assistance may find below much that is unnecessary or superfluous and perhaps too detailed, but if these notes are of real assistance even to one or two less fortunately situated officers, their object will have been achieved.

Work should be begun at least a year before the examination. It may be divided into three parts :—

- (1) Groundwork, from March to the middle of August ;
- (2) Detailed preparation, from the middle of August to the middle of February ;
- (3) Recapitulation, from the middle of February to the 1st March.

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In these notes it is intended to give a brief outline of the groundwork necessary and to deal in detail with the various subjects under (2) above. Before doing so, it is advisable to discuss one or two points which apply generally to the whole work.

2. SELECTION OF OPTIONAL SUBJECTS.

To enter the Staff College by competition, it is absolutely essential to take three optional subjects. The choice of these is important, as it vitally affects the whole work. Assuming that French is taken, there is a choice of two other subjects. Referring now to *Staff College Regulations 1921*, the following points should be borne in mind when selecting these two voluntary subjects:—

Languages (b).—If the candidate knows a second language well, he should take it; the papers are fairly easy, but it would be hopeless to start a language afresh.

Principles of Business Organization and Administration (c).—This is an easy subject, but requires much reading and experience which officers are not likely to possess. On the other hand, the questions set are easy, and anyone who has a bent in this direction could easily do well in this paper.

Political Economy (d).—This is an easy and interesting subject and the questions set are very fair. One object to be aimed at in selecting voluntary subjects is to choose one which will overlap the obligatory subjects. The one under discussion overlaps Imperial Organization and consequently has much to recommend it. This is, moreover, a subject of considerable practical value.

Elements of Engineering (e).—A fairly easy subject for an R. E. officer, but it necessitates rubbing up matter which one probably has not touched for years, and it does not overlap obligatory subjects. This is a distinct disadvantage. The difficulty is that the syllabus covers a wide range, and though one could easily answer at least two questions without doing any special work, the remaining questions necessitate much reading which is unproductive as far as the obligatory subjects are concerned.

Chemistry and Physics (f) and (g).—Not recommended for the average officer, because they do not overlap.

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History of Europe and U. S. A. (h).—This is the most popular subject of all, and it overlaps Imperial Organization. The syllabus is very wide, however, and much reading is required. It is also difficult to get books giving sufficient detail, but on the other hand, the questions can be answered well without great detail, and a close study of detail would be a waste of time.

History of British India (i).—Much the same remarks apply as for (h) above. An easy subject for officers who have been in India, but otherwise it is hardly advisable to take it.

Movements by Road, Rail, etc. (j).—This is really the easiest subject of all, and the best one to take. The syllabus seems wide but detail is not asked for in the questions, and there is one book which gives everything. The subject overlaps both Imperial Organization and Organization and Administration. This is one of the strongest arguments in favour of it. In this year's examination, three questions in Imperial Organization and two questions in Organization and Administration could have been answered on the candidate's reading for (j). These five questions were worth 1,100 marks. Further, the whole paper set for (j) could have been answered after reabing a lecture given by a distinguished R. E. officer in the R. U. S. I. in November, and any officer who had served in France could have got at least half marks without doing any reading at all. A further argument is that this subject is a most valuable one, if not a vital one, for a Staff officer to study, and a knowledge of it will be of great value at the Staff College.

Mathematics (k).—Too difficult and does not overlap

To summarize, (j), might easily take first place, and then either (d), (h) or (i), according to present knowledge and experience, choosing the one for which the least amount of reading will be required.

3 ASSISTANCE IN WORKING FOR THE EXAMINATION.

The syllabus for the exmination is so wide, and such a great range of knowledge is required that the writer has been forced to the conclusion that some assistance is absolutely essentail in working

for the examination. This does not mean to say that is necessary to employ a tutor; the writer's considered opinion it is that it is not. On the other hand, any officer, however capable, who took the examination without having had his work criticized and directed into the proper channels would stand but a small chance of success. The object of getting assistance in the work should not be to obtain "crammed" knowledge, but to cultivate a good style, clear and concise expression, relevancy, and precision; not to obtain and learn by heart masses of detail, but to cultivate the power of forming and expressing an opinion on various problems, such opinions being based on a knowledge of the causes leading to such problems; and finally not to learn prepared answers to questions likely to be set, but to cultivate rapidity, accuracy and conciseness of expression, and to apply this to the particular problem under discussion to the exclusion of all irrelevant matter. It should be possible for every candidate for the examination to obtain the help of a senior officer or of an officer of the Army Educational Corps in correcting and criticizing papers. The candidate will then get another point of view; but let him first think out the problem and express his own point of view, then get another opinion. The reverse process is a mistake, and leads to "crammed" knowledge. The value of a tutor lies in the preparation of tactical schemes, but here again the assistance of another officer is more advantageous. It is a good scheme for two officers to work together at tactical schemes; the second officer may be going up for a promotion examination. One officer should set a scheme, both work it out independently, then compare results and discuss it. Discussion is more valuable than written criticisms as far as tactical schemes are concerned.

4. GROUNDWORK.

The groundwork for the examination really extends over the whole of an officer's service, and in the examination all this knowledge has to be written down concisely, quickly and clearly. The gift of a fluent pen is therefore very desirable, if not essential in this examination. The reading of really good books and practice in writing will, however, develop power of expression.

For the groundwork it is a good plan to devote about five months, beginning in March, to reading only. Practice in writing will be obtained later. Read a little and think a lot. Do not go too much into detail. The broad lines on which this reading might be tackled would be as under :—

(a) *Training for War*.—Chiefly strategical. Read *F.S.R.*, Vol. II (1920) Chapter I, and learn the principles. Then read *Military History* and think out examples of the successful and unsuccessful applications of those principles. Of course, questions can be set on any campaign, but 1914-18 is by far the most important. The following books are suggested for reading during the groundwork period.

The Science of War HENDERSON.

The Direction of War BIRD.

It is well to begin the more or less detailed study of campaigns now, and the following campaigns are suggested :—

1914-18 in France (especially first two months and last four months) ;

1915-18 in Mesopotamia ;

1915-18 in Palestine ;

1805 Ulm ;

1806, Jena ;

1815, Waterloo ;

1861-64, Shenandoah Valley.

These do not require to be studied in great detail, but the point is to bring out the application of the principles of war and know definite examples of their application. For the tactical side of this subject it is well to read the more important parts of the new Training Manuals, e.g. *F.S. Regs.*, Vol. II (1920) Chapter III and VIII to XI.

The question of training should not be neglected, and *Infantry Training*, Vol. I, should be read.

(b) *Organization and Administration*.—Very little can be done in this subject as regards reading, as there are no books on it. The history of the British Army may be studied in *Outline of the Development of the British Army up to 1914* (Major-General Anderson).

The *Army Quarterly* and the *R.U.S.I. Journal* should be read.

(c) *Imperial Organization*.—This will probably be a more or less new subject to most officers. The reading should aim at getting hold of the broad facts and principles.

The best books are :—

The British Empire, Past, Present and Future ... POLLARD.

Foundation and Growth of the British Empire J. H. WILLIAMSON.

The British Empire LUCAS.

The Government of the British Empire ... JENKS.

Naval and Military Geography of the British Empire

Dr. VAUGHAN CORNISH.

Outlines of Military Geography ... MACDONNELL.

Get the *Times* daily, and read all important articles.

5. PROMOTION EXAMINATION. (d).

Many officers take (d) for promotion in October for experience in examination work, and the scheme is a good one. A study of 1914 is required for (d), and this is useful, but on the whole the writer is inclined to think (d) a waste of time. The knowledge required for it is more elementary, and an officer would necessarily have to spend much time on detail of administration, etc. ; otherwise there would be a risk of failing in (d) and the moral effect of that would be distinctly bad.

6. BOOKS.

The supply of books and papers must be properly organized. They divide themselves into three categories :—

(1) Library Books ;

(2) Books and Reports, costing not more than 3/- or 4/- each ;

(3) The Press.

As regards (1), most officers should have two sources of supply ; the Garrison Library and his own Corps Library. For R.E. officers, the Corps Library, as far as its funds admit, will buy any book recommended ; the difficulty is that there is a great demand for these books and one cannot usually keep them more than a fortnight ; but the Library will occasionally get two or more copies if necessary.

The small books must be bought, but money spent in this way is well invested. It is best and quickest to get all books

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through one publisher. The undernamed are very good, and will find and get any publications required :—

Messrs. SIFTON PRAED & CO., LTD.

67, St. James's Street,

London, S.W.I.

They keep a special bookshelf for the Staff College examination, and it is worth while paying a visit to their place. Official publications divide themselves into two kinds—War Office publications and those issued to the public through the Stationery Office.

The former can always be obtained from Official sources. The great difficulty with the latter is to find out what is published. Sifton Praed have a list which can be consulted in London. It is worth having a look at this, as the Stationery Office publications are a most valuable source of information, and the price is seldom more than 1-6 each, e.g., *Esher Committee Report on Indian Army*; *Montagu-Chelmsford Report*, &c., &c., It is well worth while becoming a member of the Royal United Service Institution. The entrance fee is £1 1s. od., and annual subscription, £1 1s. od. The *R.U.S.I. Journal* publishes all the lectures given at this Institution.

For notes on the Daily Press, see para. 4, part II.

In the lists of books recommended below the letters in brackets in front of the titles of the books refer to the following :—

E.—Very good book and essential to read ;

G.—Good book, but not absolutely essential ;

L.—Library Book ;

R.—Reference book to be bought and kept.

PART II.

DETAILED PREPARATION.

THE detailed preparation for the examination will now be considered. The work must be properly and systematically organized, otherwise one does not get a true perspective of the syllabus and many important matters may be overlooked.

I.

The first question to decide is the amount of time available. This depends on how fully one is employed by one's ordinary

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work during the day, and must be governed by individual circumstances. *At least 24 hours per week* should be devoted to the Staff College work, and it is better to aim at 33 hours per week. Opportunities occur for Staff College work in one's daily duty and should not be missed. If one is unfortunate enough to be fully employed at one's ordinary work for nine or ten hours a day, it is a good plan to take a month's leave previous to the examination, as a month's solid work is more valuable than the odd ends of days one can devote under these circumstances while on duty.

2. DIVISION OF TIME.

The next essential is to divide up the available time between the various subjects, more or less on a basis of mark value. The tendency is to spend too much time on the most interesting subject, viz., Imperial Organization. Assuming that 33 hours a week can be devoted to the work, make out a time-table something like that shown below. There are 11,000 marks for the examination, so each 1,000 marks is worth three hours a week.

On the other hand, if only three hours a week is spent on French, it will not be much good, and a loss of marks here would, in a competitive examination, be more serious than the corresponding potential gain in marks which extra time spent on Training for War would give. The same argument applies to other subjects.

SUGGESTED TIME-TABLE.

Day.	Training for War.	Organ. and Admin.	Imperial Organi- zation.	French.	Opt. Subj. Strong.	Opt. Subj. Weak.	Total Hours.
Sunday ...	1½	2	—	1½	—	—	5
Monday ...	1½	1½	2	—	—	—	5
Tuesday ...	3	—	—	1	1	—	5
Wednesday ...	—	2	2	—	—	1	5
Thursday ...	1½	—	—	1	1	1½	5
Friday ...	—	1½	2	—	—	1½	5
Saturday ...	1½	—	—	1½	—	—	3
Total ...	9	7	6	5	2	4	33

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If the total time available per week is less than 33 hours, the time given above for the various subjects should be reduced in proportion. This Time-table should be modified about every month as progress is made, the tendency should be to *increase* the time given for Training for War up to 12 hours per week, *i.e.*, its mark value.

It is important to keep to the time-table, tick off each day the time spent on the various subjects. On Monday, say, one might spend five hours at Training for War, but the total at the end of the week should agree with the table.

3. NOTE-BOOKS.

It is of great value to keep a note-book for each subject, so get six "Army Books, 129s" or similar books. Everything of importance should go into these books, and they will constitute a valuable stock of information to read up just before and during the examination.

It is *essential* to *index* them as each series of notes is entered in the book, otherwise much time is wasted later on searching for some particular subject. Cuttings out of newspapers should go into these books. The best way to make up these notes is not to slavishly copy out articles and papers. Read the article over twice, the second time very carefully, then putting the article aside, on a rough piece of paper put down the headings, and write in the note-book a *precis* of the article. This fixes the facts and arguments in one's memory much better than anything else. It will be found in the examination that, if a question is given on something dealt with in this way, even after a lapse of two or three months the facts and arguments come back without the least effort.

4. THE DAILY PRESS.

The *Time* is undoubtedly the best paper to read; it gives more news than any other daily paper. The best way to deal with it is to look it through carefully *every day* and cut out important articles and stick them in the note-book dealing with the subject. Do not cut out too many articles, there will not be time to read them and they only fill up the book. Do not cut out articles on *undeveloped* situations, these are not of much value. Cut out articles on

Military subjects and the debates in Parliament on Naval, Military and Air Force Estimates. These give valuable indications of Military policy. It is a mistake to spend much time reading and trying to understand a complicated article on a subject not previously studied. Put the article in the note-book and refer to it later on when the essential groundwork of the problem has been mastered. For example, it is not every officer who knows exactly the difference between an Executive Council and a Legislative Council, and it is positively a waste of time to try to understand an article on Colonial Government without first reading the chapters in either Lucas or Jenks dealing with it. Then, having mastered the essential features, read the article, perhaps two or three months after it appeared in the *Times*, and *mark in red* the important points. Marking these makes it easier, just before the examination, to rub up facts without wading through much small print.

5. TRAINING FOR WAR.

Turning now to the separate subjects, "Training for War" is by far the most important.

It divides itself into three parts:—

- (a) Strategy;
- (b) Tactics
- (c) Training.

(a). *Strategy*.—However interesting and instructive it may be, much reading of books on strategy is a mistake for two reasons:—firstly, it is very difficult to read a great deal and to retain what is read; and, secondly, such reading takes time, which is not available.

The groundwork reading the Military History should give a fairly good idea of strategy and the principles of war, and during the period of detailed preparation for the examination it is well to work up a few examples from the campaigns studied. The method of working up these examples is important. The writer considers that the best method is first to read up some particular operation or series of operations; then think out what principles of war were involved, what information did the commander have on which to base his plan? was his plan in accordance with

the principles of war? were any principles violated or neglected? was the operation successful or not? what were the reasons for success or failure? did the commander adopt any new method of applying the principles of war, &c.? The student should think out these problems for himself, after reading the narrative of the campaign. Then see what General Bird has to say on the problem under discussion. Compare the points thought of with those mentioned by General Bird.

Again compare the operations of one commander with those of another; *e.g.* how does the German plan in 1914 compare with that of Napoleon at the opening of the 1815 campaign? There are many points of similarity as regards principles, though the conditions are, of course, vastly different. It is a great mistake to read Clausewitz, Hamley, Foch, Bernhardi, &c., from cover to cover. Read less and think more. Also it is a good plan to get a senior officer or anyone who is willing to help to set some questions on strategy, such as Question 2, 3rd Paper, *Training for War*, 1921; and Question 1, 2nd Paper, 1922. Do these questions properly and get them criticized.

(b) *Tactics*.— The tactical schemes are by far the most important part of the whole work. In the 1922 examination they carried 3,250 marks. It is utterly useless to go up for the examination, unless some hard work is put in at these schemes. Some people do them automatically, but the average officer, even given much fighting experience, is not altogether at home when confronted with a map and a book of narrative. Rapidity is essential. Schemes must be fully worked out against time. For a suggested method of setting schemes, see Part I, para. (4) above. It is most important to discuss the schemes or to get them criticized. The following should be dealt with:—

Advanced Guard, Rear Guard, Encounter Attack, Outposts, Outpost Zone, Defensive Position, Flank Guard, Marches, Mountain Warfare. Bush Warfare and Desert Warfare, Convoys, Position.

Warfare—Counter Attack, Position Warfare—Raids, Ammunition Supply, Supplies, Evacuation of Wounded, Inter-communication, Guerilla Warfare and Drives.

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There are here 18 different schemes. *At least* one scheme a week should be worked, using different kinds of maps. It is useless to read through a scheme set in previous examinations and say the solution would be this or that. The schemes must be worked against time, but at first *with the help of F.S.R and notes*, so take about an hour longer than examination time until proficiency is attained. Then in the last two months or so, work several under examination conditions. There is a great variety, but it is extraordinary how similar several of the solutions are. Generally speaking, work with an Infantry Brigade Group and Cavalry both attached and independent.

(c) *Training*.—It is a sound scheme to spend a fortnight with an infantry battalion if possible and see what they do. If this can be done, get hold of their training programme for the season, and work out the why and the wherefore. The sequence of training operations is important, and the various things done in each period.

***Bibliography.*—**

- (E L) The Direction of War.—*Major-General Bird.*
- (E L) The Science of War.—*Colonel Henderson.*
- (G L) The Operations of War.—*Hamley.*
- (G L) The Principles of War.—*Foch.* (Use the French edition.)
- (E L) Stonewell Jackson.—*Henderson.*
- (E L) Forty Days in 1914.—*Maurice.*
- (G L) Napoleon and Waterloo (2 vols.)—*Becke.*
- (G) Waziristan, 1919-20—*Official.*
- (E L) Small Wars.—*Callwell.*
- (E L) The Last Four Months.—*Danrice.*
- (E L) Story of the 4th Army.—*Montgomery.*
- (G L) Battle of the Marne.—*Perris.*
- (G L) French's Dispatches.
- (G L) Haig's Dispatches.
- (E R) Notes on Infantry Tactics and Training.—*Sir G. M. Harper.*
- (E R) F. S. R. Vol. II (1920).
- (E R) Infantry Training, Vols. I and II.
- (E R) Artillery Training, Vol. III.

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- (E R) Armoured Car Training, 1921.
- (E R) Cavalry Training, 1920.
- (E R) Tank Training, Vol. I
- (E R) The Division in attack, SS.-135.
- (E R) Artillery Notes No. 4.
- (E R) Platoon Training.
- (E R) The Division in Defence, SS 210.
- (E R) Signal Training, Part VIII (provisional.)
- (E R) *R. U. S. I. Journal.*
- (E R) *Army Quarterly.*
- (E R) Report on Examination for Admission to Staff College, 1921.
- (E R) Report on Examination for Admission to Staff College, 1922.
- (G R) Report on Examination for Promotion, 1920.
- (G R) Report on Examination for Promotion, 1921. -

6. ORGANIZATION AND ADMINISTRATION.

This is a most difficult subject to deal with, because there are no books whatever on it. The pre-war books are worse than useless, as they are out of date, and they deal with facts rather than problems, though Collin's book is useful for reference.

A good scheme is to write down all the problems which may form the subject of a question. This does not mean that prepared answers are to be learnt by heart, but such a list should rather give a basis upon which to work up the whole subject. Think out the various problems, and find out the causes which led to the change of organization, or, for future problems, find out what are the arguments for and against certain proposals. The mere discussion of these problems will give rise to others. Discuss them with other officers who may be working for Staff College or promotion, or with senior officers, and make them the subject of an essay in the Organization and Administration note-book. There are sound reasons for every change in military organization, and every fresh change must be carefully considered before it is adopted. Think out these reasons in each case, apply them to past history and future requirements. The whole subject of Organization and Administration requires thought and reasoning rather

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than much reading. The following are a few suggested subjects for discussion :—

Action in aid of the Civil Power, Cost Accounting, Cavalry and Tanks, Cavalry and Aircraft, C. I. D., Co-operation with the Dominions in Military Organization, Clothing Allowances - New Scheme, Conscription *v.* Voluntary Army, Divisions of U.K. for Administration, Dominion Armies (see F. S. P. B., and bring it up to date), Demobilization, Defence Ministry—Arguments for, Daily Messing Account, Educational Training, Expansion of Regular Army in War, Foreign Armies, Geddes Economy Report—Effect of Reduction, Headquarters Units, Indian Army Reform, Linked Battalions and Depôts—Draft Finding, Mobilization, Mechanicalization of the Army, Officer *i.c.* Records, Recruiting during the War and at Present, Reorganization of the various arms (post-war), Recreational Training, Regimental Paymaster, Territorial Army, Terms of Enlistment—Reserve and Colour Service. The highest self-contained tactical unit—Brigade or Division, Two Brigades *v.* Three Brigades, Four Companies *v.* Eight Companies, Battalion Guns, Transfer Act during the War, Traffic Control, Divisional Control *v.* Brigade Control for M. G's, T. M's., &c., Brigade Control *v.* Battalion Control for M. G's., T. M's., &c., Transportation Organization in France, Organization of Sea Transport, and so on, *ad infinitum*.

The best sources of information on these subjects are the *Army Quarterly* and the *R. U. S. I. Journal*; the articles in these periodicals touch on most problems, except perhaps those which are apparently too simple and well-known to need mention, but which one finds one knows nothing about when it comes to putting cold facts on paper, *e.g.* :—Which is the better plan, to provide drafts for abroad from the linked battalions at home, or from the depot direct? There are strong arguments in favour of each plan.

The History of the British Army has not been included in above, as Major-General Anderson's book gives a very clear account and is very valuable.

There are several questions in "Organization and Administration" on Military Law. It is very important to get M. M. L.,

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and *K.R.'s amended up to date*. Stationery Office issue amendments periodically. Note that no question is asked in the examination on matters published less than six months before the examination. The questions carry only low marks, but it is worth while working out a few examples so as to get to know the way about these books.

Bibliography.

- (E L) *Military Organization and Administration*.—*G.R.N. Collins*.
- (E R) *Outline of the Development of the British Army up to 1914*.—*General Anderson*.
- (G L) *The Body and Soul of an Army*.—*Sir Ian Hamilton*.
- (E R) *Statesman's Year Book*.
- (E R) *Army Quarterly*.
- (E R) *R.U.S.I. Journal*.
- (E R) *M. M. L.*
- (E R) *K. R.*
- (E R) *T. F. Regulations*.
- (E R) *Esher Committee Report on Indian Army*.
- (G R) *Geddes Committee Report, Part I*.
- (E R) *F.S. R's, Part II*.
- (E R) *F.S.P.B.*

IMPERIAL ORGANIZATION.

This is the easiest and most interesting subject of the obligatory ones, but avoid spending too much time at it. The best way is to lecture to N.C.O's and men on it. The 2nd Class Certificate of Education includes a good proportion of what is required and the instructor can choose his own syllabus.

Write out the lectures, it gives very good practice, and write them out more fully than is necessary for the delivery of them. It is not necessary to give the complete lecture to the men; it would be beyond their requirements, but it should be possible to get the lectures criticized by an officer of the A.E.C. Of course, further reading must be done for this subject, and the object aimed at should be to get a thorough grasp of the main principles

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of Imperial Organization and to think out the problems now confronting us, both within the Empire, and as regards foreign policy.

A good atlas is essential. The *Times Atlas* is the best, but it is bulky and heavy. *The Comparative Atlas* (Meiklejohn, price 4/6) is handy, and though it does not give much detail, is useful when reading articles in the Press.

It is not a good scheme to concentrate on one or two colonies and learn everything about them, for two reasons : firstly—too much detail will be learnt ; and, secondly, the question in the examination is more likely to deal with a general problem.

There is no short cut for this subject ; it is essential to read the best books and to think out the problems oneself. On the 1st of each month the *Times* reviews the monthly magazines, and there are often very useful articles in some of them. These can usually be seen in any club, and it is hardly necessary to buy the magazines. *The Round Table* is a quarterly review (5/-), and is excellent for current Imperial questions.

***Bibliography.*—**

(E L) British Empire ; Past, Present and Future.—*Pollard* (Ground-work of history up to 1907.)

(E L) Foundation and Growth of the British Empire.—*J.A. Williamson*. (Elementary.)

(E L) The Government of the British Empire.—*Jenks*.

(G L) Expansion of the British Empire.—*Woodward*.

(E L) The British Empire.—*Sir C. Lucas*.

(E L) Rise and Expansion of British Dominions in India.—

Sir A. C. Lyall.

(E L) Influence of Sea-Power upon History.—*Mahan*, (First part only.)

(E R) Frontiers.—*Fawcett*.

(E R) Imperial Military Geography, a Lecture.—*Vaughan Cornish*

(E L) Imperial Military Geography.—*J. Fitzgerald Lee*,

(1/-.)

(G L) Outlines of Military Geography.—*Macdonnell*.

(G L) Britain and the British Seas.—*Mackinder*.

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- (E L) *The Future of the Empire*, 1918.—*Mills*.
- (E L) *Seaways of Empire*.—*Sargent*.
- (E L) *Sea-Power in the Pacific*.—*Bywater*
- (G L) *The Truth about China and Japan*.—*Putnam Weale*.
- (E R) *Statesman's Year Book*.
- (E R) *Army Quarterly*.
- (E R) *The Round Table*.—5/-, quarterly.
- (G R) *Summary of Proceedings of Imperial Conference, 1921*
(Comd. 1474), 9d.
- (G L) *Imperial Defence*, 1903.—May. (Out of date, but useful.)
- (G R) *Aeronautical Journal*.
- (E R) *R. U. S. I. Journal*.

Magazines : *Fortnightly Review*, *Contemporary Review*, *Nineteenth Century*, &c., when suitable articles appear.

- (E) *Comparative Atlas*.
- (E) *The Times*.

8. FRENCH.

The standard is very high in French, but there is not much difficulty, given a previous knowledge of French. It is a waste of time to go to France especially to study French for the examination, as there is no oral examination, and one would never in ordinary conversation hear the military words required in the examination.

The best scheme is first to go carefully through *Hugo's French Simplified* and make absolutely certain of all the grammar, if one is not already an expert French scholar. Then do translations, and essays. Select pieces for translation from *F.S.R.*, *Army Quarterly*, etc., and other books. Translate them, and get them corrected by a Frenchman if possible. The present writer can give any officer the address of a Frenchman who will help for a small fee and who takes much trouble.

These translations are very difficult, but the examination papers are very difficult, and unless one does some beforehand one has no chance in the examination. It is very important to write

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essays on military subjects, and these exercises can well be combined with the obligatory subjects. Always use a *French* dictionary, i.e., one written in French whenever possible, and only look up an English-French dictionary when one is absolutely stuck for the word. Translate several military terms into French. The usual French Military Term Book is pretty useless and does not give any of the words met with in *F.S.R.*

Read a French newspaper occasionally, and also read the French Training Manuals. This is most important and is essential. The object is to work up a *military vocabulary*. Later on, when reading *F.S.R.*, etc., translate in straight off into French without writing it down.

***Bibliography.*—**

- (E R) French Dictionary, Larousse Élémentaire Illustré (7/6).
- (E R) Hugo's French Simplified. (6/-).
- (E R) French and English Technical Military Terms.—*Deshumber* (3/6).
- (G R) Règlements sur le Service des Armées en Campagne 1916.—*Ministère de la Guerre*, Paris.
- (E R) Règlement Provisoire de Manœuvre d'Infanterie. Première Partie, 1921.—*Ministère de la Guerre*, Paris.
- (E R) Règlement Provisoire de Manœuvre d'Infanterie Deuxième Partie, 1921.—*Ministère de la Guerre*, Paris.
- (G) *Revue Militaire Française* (monthly, 3/6).
- (G) Les Principes de Guerre.—*Foch*.
- Chambers' French-English—English-French Dictionary.
- (G R) Half Hours of French Translation —*Mariette*.*
- (G R) Key to Ditto.—*Mariette*.*

* Very advanced, but extremely useful.

9. POLITICAL ECONOMY.

The writer did not take this subject, but the best way to treat it is to write notes on the principal subjects, after reading the books recommended. The subject is interesting, and does not

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require much reading, since practically every officer has a good working knowledge on which to base his preparation for the examination.

Bibliography.—

(E L) Political Economy.—*J. S. Mill.*

(E L) Principles of Economics.—*Marshall.*

(E L) Elements of Economics.—*Marshall.*

(E L) Manual of Political Economy.—*Henry Fawcett.*

10 HISTORY OF EUROPE AND U.S.A. SINCE 1848. HISTORY OF
BRITISH INDIA.

The writer did not take these subjects, so does not feel competent to tender advice to those working at them.

The general principles governing the work noted above will, however, always apply, the chief of which is to read a limited number of the best books and think out the problems involved.

Bibliography.

Outline of Modern European History.—*Rogers.*

Select Treaties and Documents to illustrate development of Modern European States.

Modern Europe.—*Grant.*

The Development of European Nations, 1870-1900.—*Dr. Holland Rose.*

The United States in our own times, 1865-1920.—*Haworth.*

The United States from 1765.—*Channing.*

History of the United States.—*Elson.*

Sir Charles Lucas's Historical Geography, Vol. III (India), 2 parts.

History of India.—*Sir W. Hunter.*

Rise of British Dominions in India.—*Lyall.*

Montagu-Chelmsford Report.

11. MOVEMENTS BY ROAD, RAIL, CROSS-COUNTRY, WATER, AIR.

The paper set this year shows a reversal of policy as regards this subject. Nearly all the questions bore upon Transportation problems in France, 1914-18

If this type of question is to predominate in future the subject becomes very easy, but it would not be safe to entirely neglect

the syllabus. The best sources of information as regards the military side of this subject are the *R.U.S.I. Journal* and the *Journal of the Institute of Transport*. Kirkaldy & Evans' book gives practically everything about all the other questions. The subject is very interesting and an easy one to get hold of. It is further of considerable value in working for the obligatory subjects.

Bibliography.—

(E R) The History and Economics of Transport.—*Kirkaldy and Evans*.

(E R) Elements of Railway Economics.—*Acworth*.

(G L) Rivers, Canals and traffic on Inland Waterways.—*Vernon Harcourt*.

(E R) *Journal of the R.U.S.I.* (quarterly).

(E R) *Journal of the Institute of Transport* (monthly)

(G R) *Aeronautical Journal* (monthly).

(E R) Report of Civil Committee of Aerial Transport (9d.),

(G R) Airships for Commercial purposes (3d.).

(E L) Seaways of Empire.—*Sargent*.

(G R) Lloyd's Calendar.

12. RECAPITULATION.

This consists chiefly in reading up notes and papers. During the last fortnight before the examination it is not worth while embarking upon fresh investigations which will take time. It is better to consolidate and fix in the memory the facts already noted. The whole programme of work may be compared with the operations of the photographer. He first takes a negative, then develops the plate and then fixes it. The groundwork and preliminary investigation of any branch of a subject corresponds to the taking of a negative. The student then thinks over the arguments and points, and *develops* them in his mind. He then *fixes* these arguments and points by reading them over and perhaps writing a paper on them. In the examination he produces the finished *print*.

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13. THE EXAMINATION.

So many mistakes are made in procedure during the examination that a few notes on it will not be out of place.

The War Office issue :—

- (1) Report on previous examinations, giving the papers set and the examiners' remarks ;
- (2) Notes on Staff College Entrance Examination, 1921.

Read both of these very carefully. (1) is essential during the whole course of preparation, but the student should *read, mark, learn and inwardly digest* (2).

14.

The question of a proper distribution of time in the examination is of vital importance. Allow 15 minutes per 100 marks, and *do not spend longer than this* on a question carrying low marks, *e.g.*, in "Training for War," 1st Paper, 1921, Question 1 is worth 100 marks, Question 2, 300 marks and Question 3, 250.

Some officers spent one hour on Question 1 and had no time to even begin Question 5, which was worth 150. In the Imperial Organization papers each question is worth the same marks—250 if four questions, and 200 if five. Therefore spend three-quarters of an hour on each question in the first case, and just over half-hour each in the second. *It is vital that this allocation of time be strictly adhered to.* The marks gained by titivating answers to one or two questions will not compensate for those lost through completely spoiling the answer to the last question in the paper.

15.

In "Training for War" papers first read the *whole* scheme through, *underline* the salient words, and write notes in pencil on the left-hand side of the page on the principal points of the scheme. Cut out all non-essential. Number the remainder in the order in which they will be taken. Never write out the *scheme* again, but fasten on to the points that matter, *i.e.*, the governing factors. Rapidity is essential. If you have done schemes *against time* there should be no difficulty. If the facts and factors are fixed in one's

mind it does not take long to write them down. What is written down must be clear and concise.

16.

Organization and Administration papers and Imperial Organization papers give a choice of questions. Read the whole paper through first, then consider carefully what questions will be answered, and mark them. Tackle first those you know best, and think out carefully exactly what is meant by the question. Each question is an essay in itself. Write down on the left-hand side of the paper the points bearing on the subject, *i.e.*, headings of the answer. Leave room to insert other points thought of afterwards, cut out those not essential and number the remainder in the order in which they will be taken. Keep any strong argument for the last and make the conclusion convincing. Having decided how to deal with these questions, commence writing. In a half-hour question take ten minutes to consider it and do the above rough work and allow twenty minutes to write the answer. If there is time, read the answers over to correct spelling mistakes and punctuation errors.

17.

Finally, it is very important to bring into the examination room a complete equipment of writing materials, etc., so that no time may be lost when actually working the papers and so that clear sketches may be drawn. The following will be found useful :—

Field Service Pocket Book.

A fountain pen with which one can write quickly.

A red ink fountain pen (not essential).

Coloured chalks.

Pencil.

Rubber.

Map measurer (very useful).

Protractor.

Scales with miles and yards marked :—

- (a) 1 inch to 1 mile ;
- (b) 1/20000 ;
- (c) 2 miles to 1 inch ;
- (d) 1/100000.

These scales are most useful to get artillery ranges, frontages, etc., quickly off the map. They can be drawn on a piece of drawing-paper if the protractor does not give them. They save time in the examination.

Always draw sketches to a large scale, and indicate very clearly the exact location and units of all troops in questions necessitating the disposition of troops on the map.

CHARACTERISTICS OF GREAT LEADERS.

A LECTURE DELIVERED AT THE STAFF COLLEGE, QUETTA IN 1922.

By Major C. D. Noyes.

AS soon as War breaks out a host of amateur strategists appear at street corners and in every club and public house throughout the country who show how the war is to be brought to a successful conclusion within a few weeks.

During the Great war a number of business men in London used to meet at various places to discuss the military situation. They went to considerable trouble and expense to obtain the best information and maps on the theatre of operations they were discussing, but sailors and soldiers were not invited to their debates except very occasionally, and then only as spectators. At one of these debates which took place in 1917 the Operations for the relief of Kut together with the Report of the Mesopotamian Commission were the subjects under discussion.

The soldiery naturally come in for a bad time at the hands of these gentlemen and it was generally agreed that none of those who had been entrusted with conduct of the campaign were fit to hold any position of responsibility. Eventually the discussion turned on to the subject of leadership and what qualities were required in a successful General. Most of those present were agreed that no special training was required and that War was merely a big business proposition and would be best conducted by men who had risen to the top of the business world. In fact generalship was little more than a matter of common sense combined with considerable business acumen. One man at the debate did argue that War was a highly specialized profession but his arguments were entirely unconvincing and were ridiculed by the remainder. One is always coming across this sort of criticism. In a book recently published, it was stated that "Mr Lloyd George possessed more strategy in

his little finger than the average general in his whole body". The object of this discussion therefore is an endeavour to show that there are certain qualities which are essential to the successful command of Armies.

One is rather defeated at the outset of such a discussion by the example of men who, with little or no experience of military affairs, have taken up the profession of arms, often late in life, and have become successful generals. For instance Cromwell became a soldier at the age of 43. He was at that time M. P. for Cambridge and his early training was not such as was likely to fit him to be a great Commander. Yet it has been said of him that in a few years he became the ablest General, not only in England, but probably in the whole of Europe. There are also many examples in the Great War of men who, before hostilities commenced, were engaged in various walks of life quite unconnected with the Art of War and who rose to the highest ranks in the Army.

Similarly, it has often been said that War experience is an essential qualification for a successful leader, and yet none of Napoleon's Marshalls showed military genius of a very exceptional degree though their experience of War cannot be said to have been inadequate. The fact that their early education had, in many cases, been practically nil rendered them unable to profit by their great experiences. Even Massana, whom Wellington regarded as the most skilful of Napoleon's lieutenants, had had practically no elementary education, having risen from the ranks and his father being the keeper of a tavern near Monte-Carlo. On the other hand Stonewall Jackson had little experience of War, with the exception of minor engagements in Mexico, until he showed such remarkable powers of leadership in 1861.

Again honesty and straight-forwardness are often said to be essentials for a great Commander. Sir G. Barrow, lecturing in Peshawar some time ago on "The soldierly Spirit", mentioned how many of the great British Generals of the past had been religious men, quoting as examples Cromwell, Wellington, Wolseley, Roberts and Kitchener. Price Collier, in referring to Cromwell

in his book "The West in the East", says "When a man arms himself with the Bible and clothes himself with the shining armour of Scripture, look out for him. One seems able to strike more suddenly, more unexpectedly and more fiercely with that weapon than with any other." But, when we enquire into the character of the most successful of them all, we find a different story, with these qualities almost entirely out of the picture. In fact, Lord Wolseley in describing the character of Napoleon says "He cared nothing for what we regard as virtue; his whole career from childhood to the day of his death, was one great untruth and was made up of deceit, treachery and the most appalling and selfish indifference to the feelings and wants of others...was, in fact, one great unholy deception."

Even personal appearance has been included amongst the attributes of a general. General Maurice in "The last four months" says "Hindenburg's square head, his burly figure etc, made him an admirable embodiment of Prussian militarism and provided the Kaiser with just the personality required at Great Headquarters to keep the war fever in the Fatherland at boiling point". But when one thinks of Cromwell's repellent features and swollen countenance, not to mention the great wart on his nose, one realizes that his appearance was of little assistance to him in his profession.

And so one could go on ad infinitum. What has been put down as the cause of one man's success finds no part in another's. A study of the lives of successful Leaders of the past shows, however, that the following qualities were common to nearly all of them and that the more developed these qualities were, the more successful were their owners until we get down to Napoleon and Wellington who possessed them all in the most marked degree

1. Knowledge of men.
2. Imagination.
3. Professional knowledge.
4. Self-confidence.
5. Responsibility.
6. Resolution.
7. Strength of mind and character.
8. Physical energy.

Characteristics of Great Leaders.

A recent American writer on "Leadership" lays down no less than 16 qualities as necessary in a man who aspires to Command but all these are included in the above eight which in turn can be still further boiled down to

1. Knowledge of Human Nature.
2. Professional knowledge.
3. Sustained enthusiasm.

Now these military virtues are comparatively common, especially in the British race, but it is their development to the degree which constitutes real military genius. Napoleon said that a man is born with the qualities of a military leader but he also showed how these qualities could be developed. There are no doubt other qualities which stand out in one or other of the successful generals of the past, such as physical courage and patience, the great attribute of the Duke of Marlborough, but they all seem to have possessed these eight developed to a very high degree. The following examples illustrate the possession of these qualities by one or other of the successful Commanders of the past.

Knowledge of men.

Field Service Regulations, Vol. 2, Chap. 1. says "Above all it must be remembered that military genius depends largely on a knowledge of human nature and how to handle it to the best advantage". This attribute is probable more essential in a British General than in any other, owing to the diversity of races in the Empire and to the British temperament, which does not lend itself easily to discipline. And it is certain that they have possessed it to a very marked degree, Lord Wolseley being especially famous for his capacity for the selection of suitable subordinate commanders. To quote Von der Goltz, "A Knowledge of men allows a general at once to discover the proper channels through which to make his will felt and to assign to his subordinate commanders the several duties most suited to their energies and inclinations. Fully one half of all the conditions of success consists in finding the proper persons to carry out schemes". Lord Wellington's employment of Hill in the peninsula in just those capacities which best suited his qualities as a daring leader in the attack is an example of the

former's insight into the character of his subordinates. Napoleon, too, invariably used Ney for rear-guard actions where his stubbornness in defence was given full play. Napoleon's soul stirring proclamations had a most wonderful effect on his troops and were just what was required to appeal to the French temperament. He also knew well how to make use of his own personal magnetism. The very crew which took him to St. Helena fell under his spell and he knew well that if only he could have been sent to England the whole country would soon have been in sympathy with him.

Imagination.

This attribute is undoubtedly one of the most vital necessity to a Commander. The power of being able to picture what is going on behind the enemy's lines and in the mind of the opposing general is one which seems to have peculiarly belonged to both Napoleon and Wellington. The story of the latter's behaviour at the battle of the Pyrenees in July 1813 is a good illustration of a great commander's insight into the mind of his adversary. Soult, the French commander, had only recently arrived to take over charge of the Army and on the 25th. of July with very superior forces attacked Wellington's right under Picton which was covering the fortress of Pamplona. Picton was forced to retire and Wellington, riding at full speed, arrived on the scene from the other flank and reached the village of Sorauren where his quick eye detected the French column on the march to intercept the British retreat. He immediately scribbled a note directing the troops to take another road. The only Staff Officer who had been able to keep up with him galloped off with these orders out of Sorauren by one road, the French Light Cavalry dashed in by another and Wellington rode alone up the hill-side to reach his troops. One of Campbell's Portuguese battalions first saw him and raised a cheer which was caught up by the next regiments and swelled as it ran along the line into a great yell. Wellington stopped in a conspicuous place and a spy who was present pointed out Soult, then so near that his features could be plainly distinguished. The English General, it is said, fixed his eyes attentively on his opponent and, speaking to himself, said, "Soult is a great commander but a cautious one. He

will delay his attack to ascertain the cause of these cheers; that will give time for the 6th. Division to arrive and I shall beat him." And certainly the French general made no serious attack that day.

Professional knowledge.

Henderson says "In all the ages the power of intellect has asserted itself in war. It was not courage and experience only that made Hannibal, Alexander and Caesar the greatest names of antiquity. Napoleon, Wellington and the Archduke Charles were certainly the best educated soldiers of their time; while Lee, Jackson and Sherman probably knew more of war before they made it than anyone else in the United States."

In the case of men like Cromwell who had no previous professional knowledge it will be found that they were always men of very quick intellect and that they studied hard the past masters of the Art of war once they took up soldiering. In spite of this it took Cromwell six years to become a general.

Self confidence.

Any wavering on the part of a commander permeates all ranks below him in an incredibly short space of time. As the Bible has it "If the trumpet give an uncertain sound, who will prepare himself for the Battle?" Self confidence is really begotten by professional knowledge but, should it exist without that knowledge, it becomes a very dangerous possession as in the case of Banks in the war of Secession. He knew nothing whatever of soldiering and it was said that Lincoln had undertaken to make of him what the good Lord hadn't—a great general. His appointment was entirely a political one, and cost the Federals very dear in the lives of their men. On the other hand the self-confidence of Stonewall Jackson who maintained that a man can do whatever he wills to do, can be put on a par with the statement of Bonaparte, the brigadier of 25 years old, "Have patience—I will command in Paris presently—what should I do there now?" The self-confidence of Jackson, Wellington and Napoleon is also to be seen in the way that none of them sought the advice or

opinions of their subordinates. Jackson held but one council of war during his career and after it he swore he would never hold another, while Napoleon was of the opinion that a council of war was only valuable as an excuse to do nothing and usually resulted in one's plans being divulged.

"Platoon Training" puts the case for self-confidence in a general in a nutshell if we substitute the word "Army" for "Platoon" when it says "The fighting spirit of the platoon is derived from its commander. In the Commander it springs from his own resolute belief in himself, in the supreme necessity for winning the war and in his country's ability to win it."

Responsibility and Initiative.

These qualities are difficult to teach, especially in the Army where, in peace time, responsibilities of junior officers are not so great as in the Navy.

The lack of responsibility and initiative amongst subordinates was the complaint of the great leaders of the past, and it was with a view to encouraging these qualities amongst soldiers that Moltke created the General Staff with one sound doctrine permeating it throughout. The readiness to accept the most enormous responsibilities by such men as Wellington and Napoleon is too well known to require repetition.

The battle of Dujailah in Mesopotamia, on March 8th 1916, has been quoted as an example of the lack of initiative the Turkish trenches were found practically unoccupied but our forces did not seize them as the artillery bombardment had not taken place. The result was that they were occupied in great strength by the enemy very shortly afterwards, and we suffered some 4,000 casualties in vainly trying to carry the position later on in the day. Some people assert that this cost us also the Kut garrison.

Resolution.

Wellington gives us a wonderful example of this quality at the time when Ciudad Rodrigo was invested by the French in July 1810. His army was close at hand and the salvoes from Messéna's guns sounded in the British camp, and the musketry was heard

distinctly at the outposts. The city held nobly out and nothing would have pleased Wellington better than to go to its assistance. One march would bring him to the city, and all expected that the attempt would be made. The troops desired the enterprise, the Spaniards demanded it as a proof of good faith and the Portuguese to keep the war from their own country. Massena, in his proclamation, taxed Wellington with timidity, and accused him of breach of honour and good faith in allowing his ally's fortress to fall without risking a shot to save them. Nothing, however, would shake the determination of the British General. The course that others urged he saw was madness. He might succeed in bringing off a raw garrison at the expense of twice their number of good soldiers and the result would be the loss of Portugal. Stern in his purpose Wellington remained inflexible and to his resolution not to stand the issue of a battle the downfall of Napoleon's dynasty may be traced.

One might go on quoting innumerable examples of this quality—so highly developed in the military genius. The lack of it is also to be found in generals of less ability; e.g. McClellan, who was capable of conceiving great plans but seldom had the resolution to carry them through.

Strength of mind and character.

This attribute is closely allied to "Resolution". Clausewitz defines a strong mind as one which can maintain serenity under the most powerful excitement, and character he defines as "tenacity of conviction". The complete "sang-froid" of Napoleon in the heat of battle is well known, and one of his maxims says "The first quality required in a commander is to keep a cool head in order to form a correct impression of things; he should not allow himself to be dazzled by good or bad news; the sensations which he receives throughout the day, either simultaneously or successively, should each be so classified in his memory as to occupy its merited place; for reason and judgment are the result of the comparison of several sensations taken into equal consideration."

For tenacity of purpose and conviction it would be difficult to find a finer example than that of Wellington throughout the Peninsula campaign. Towards the close of the year 1809 after his victory at Talavera he had been compelled to retreat owing to paucity of numbers. Spain was gasping at the feet of Napoleon, who was then at the zenith of his power, and Britain was almost exhausted by the immensity of her efforts. At this time there were few who did not yield to despondency, but Wellington never wavered, always keeping in mind the ultimate object of wearing down the great Corsican.

Physical energy.

One cannot help being struck by the marvellous energy and powers of endurance of these supermen. There is the story of Jackson standing sentry over his exhausted men throughout the night after their 20 mile march before the first battle of Manassas. Wellington seems to have been in the saddle all day and to have worked more than half the night at his voluminous correspondence. Here is the programme of one day in the Peninsula :

Work in the field and in office from 8 a.m. to 3-30 p.m.
Rode 17 miles to a dinner and dance.

Stayed to supper and rode back 17 miles at 3-30 in the morning.

Back at work again early that morning.

The energy of Napoleon must have been even more wonderful, for he combined the Rulership of France with the Leadership of his Army. Napoleon's final downfall too has often been attributed to the lack of energy he displayed in the 1815 campaign.

Such were the characteristics and outstanding qualities of the Leaders of the past, and the question at once arises as to whether those same characteristics are exactly what is required in a leader of the present day. The personal influence of a Napoleon or a Wellington had a very marked effect on the troops of their day. They all saw their leader constantly and learnt to respect him personally. He was personally able to enter into their troubles and on occasion actually led them in battle. The actual generalship too, i.e. the strategy of the campaign and even

the tactics of the battles was more often than not a "One man show" and the subordinate generals could be controlled by their chief throughout the battle. It was then a case of one man's wits and skill against another's. Von Moltke was the first to realize that war was no longer a "one man's show" and that everything could not be controlled by a single individual. He saw that the Commander-in-Chief could no longer exercise that personal influence over an Army consisting of a Nation in arms, that Napoleon had exercised, and that once an Army had been launched into battle, it could not be controlled by one man as hitherto, but it must be left, in a great measure, to subordinates to decide the issue.

Von Moltke saw too that the whole resources of a country would be called into use in future wars and that the administration of the army must be a thing apart from its direction. And so he introduced a "system", designed to a great extent to replace the "man". The German General Staff was formed with a view to training a body of officers in the higher command of troops, all impregnated with certain general theories as to the conduct of war and supplying the armed forces of a Nation with a body of experts to guide it instead of one individual.

The Germans, however, did not entirely do away with the "man"; they considered that it was necessary to have a Commander at the head of the Army in the Field who, by his prestige, would infuse moral into the troops. It was with this idea that Hindenburg, the popular victor of Tannenburg, was selected as Commander-in-Chief of the German Army with Ludendorff as the brains of the "system". Similarly, the Army Commanders seem to have been selected more for their prestige than for their military prowess as, for example, the Crown Prince of Germany and Prince Rupprecht of Bavaria.

The General Staff system was adopted by nearly all the European nations, but no other nation went quite so far as Germany in replacing the "man" by the "system". Marshall Foch in all his teaching had consistently advocated the truth of Napoleon's maxim that it is not the soldiers who win battles but the

general. He says that the growth of modern armies can only enlarge the responsibilities of the commander, for it is he who must, by one means or another, inspire his army with the same moral power, the same will to victory, which fills himself. And he goes on to say "No victory is possible unless a commander be energetic, eager for responsibilities and bold undertakings; unless he possess and can impart to all the resolute will of seeing the thing through."

The French therefore relied on finding a "man" at the psychological moment to work the "system" whereas the Germans considered that the "system" would be a useful help to the military genius, if one were forthcoming at the time, but that it could easily be worked with success by a man of only mediocre attainments.

History will assuredly say that the French found their "man" in Marshall Foch, and what little information is available as to his character shows that he possessed all the above eight qualities developed to the highest degree. His professional knowledge had given him a reputation outside France long before 1914. General Canonge, who had also been an instructor at the Ecole de Guerre describes Foch as "inaccessible to discouragement, calm and always confident" and praises his "great knowledge, his power of envisaging a situation, his readiness to take a decision, his virility of mind and his unshakeable and infectious confidence." For his resolution there is a story of how, when a general who, in a desperate situation, declared that there was nothing left but to be killed, Marshall Foch replied "No, first we must resist," and how, when the Allies were being driven back at the end of March 1918, he declared "Before Amiens, in Amiens, and behind Amiens I will go on fighting."

The trials and responsibilities of Marshall Foch, when in command of the largest army the world has ever known, and that composed of several nations in arms, can hardly be imagined and, as Sir F. Maurice says, "The fact that he retained the confidence of the allied armies and governments even after the Crown

Prince's successful drive to the Marne in May 1918 is one of the greatest tributes to his strength of will and character." Lord French too, in his book "1914", speaking of Foch says "Of all the Generals in the great struggle he most resembles in audacious strategy, his great master, Napoleon": The name of Foch will undoubtedly go down to posterity as one whose qualities equalled ; if they did not excel those of the great leaders of the past ; for his burdens were incomparably greater than those of the man upon whom he modelled his whole theory of war with which went hand in hand his practise of it.

One is forced therefore to the conclusion that, in spite of the great increase in the size of armies and the more complicated nature of modern war, identically the same qualities are required in a military commander of the present day as were required in the past.

**"PRINTS OF BRITISH MILITARY OPERATIONS
1066-1868"**

(AUTHOR-LIEUT. COL. C. DE W. CROOKSHANK.)

Reviewed by Lieut. General Sir G.F. MacMunn, K.C.B., K.C.S.I. etc.

The United Service Institution of India was recently presented by the author Lt. Col. C. de W. Crookshank with a copy of his remarkable catalogue, raisonné of "Prints of British Military Operations" extending from the Norman conquest to the campaign in Abyssinia. The catalogue is really a brief outline of all the campaigns in the period and a list of pictures relating thereto, and in addition to 15 quarter plates in the "catalogue" itself it is accompanied by a remarkable portfolio of 16 full size reproductions of some of the more famous pictures, coloured prints being reproduced in colours (Publishers Adlard and Sons, and West Newman Ltd. 23, Bartholemew Close, London).

The work is that of an expert collector, who wishes the world to have the advantage of his years of study of his subject, and the portfolio is specially calculated to allow of officers and messes who cannot obtain originals, framing the reproductions, which are admirably suited for the purpose.

To the collector who starts on his ambitious career of collecting Military prints, the conflicting and varied series of such is more than confusing and it is only by the help of the catalogue, which is practically the first comprehensive one of its kind, unmixed by the equally confusing subject, of British Military costumes, that daylight begins to dawn.

Those fascinating Indian series are fully dealt with, such as Singletons pictures of the Mysore War, the ten plates of the Sikh Wars by Harris after Martens, the even more attractive drawings by Captain Young of the Bengal Engineers of Chillianwallah and Goojerat and the plates of expedition to Kangra, are fully explained. The reproductions in the portfolio include one of

Singleton's "Seringapatam," Martens, "Sobraon" and "Mooltan," and Young's "Chillianwallah". Young's pictures are more than pleasing and are especially well grouped, the passage of the Chumbal by Sir Hugh Gough's Army en route to Gwalior in 1843 being a remarkable piece of perspective.

The wars with the French from the Revolution to Waterloo were naturally very productive of Military pictures, and these are very fully dealt with. 166 prints or sets of prints and views are enumerated, and the portfolio reproduces eight, of which Alexandria, the Pyrenees and Vittoria, are the most attractive, the two latter by Moses and Lewis after Wright. The author explains that the Norman conquest is the first campaign to be pictorially described at the time, and that in the Bayeux tapestry, from which the prints by J. Basire after Stothard were published early in the 19th century.

Among the interesting notes of the author, is a description of the tendency of publishers of the 18th century to make one print do duty for more than one scene, reproducing earlier pictures as representing later scenes by changing the title and descriptive writings. As an example he produces a plate of "Londonderi" and the taking of Athlone, for both of which the same picture is reproduced, with varying additions.

The last print of the series produced in the catalogue is the "Capture of Magdala" by Alfred Concanen from a sketch by a Staff Officer. The British Dragoons present are shewn in scarlet wearing brass helmets, which is presumably historically correct.

Several of the prints reproduced have keys, which while interesting enough, draw attention to the irritating habit of artists in trying to reproduce in one picture incidents that happened in different parts of the field, and at different periods of the battle. This is particularly noticeable in that particularly charming print after Martens, of the Charge of the 14th Light Dragoons' at Ramnagar, where the actual letter press on the print contradicts itself in its description of the sequence of incidents.

Colonel Crookshank's references in the Catalogue 'raisonné' are remarkably clear and useful for, as in addition to the complete list of campaigns, with brief description of each, and lists of prints illustrating each we are given a complete index of prints themselves under incident and title, and also an index of artists and engravers.

The gift of Catalogue and Portfolio is a very valuable addition to the already considerable number of such works of reference in the Institution Library, and both publications are very strongly commended to officers and units in search of pictures and information, or perhaps most of all to those who are searching for some suitable object to present to their messes.

REVUE MILITAIRE GENERALE.
(OCTOBER 1922).

This number contains two articles that, from a British point of view, are of special interest.

The first, "La Tactique de la Guerre Coloniale" by General Mangin touches on the main points of the tactics of small wars. The author prefaces his essay by remarking that colonial wars have now become of great importance but that no new principal is involved in this type of war though some seem to imagine so.

The chief characteristic of this type of warfare is the small column, equipped with modern arms trying to bring to battle, in a wild and extensive terrain, a more numerous and mobile but poorly armed foe. The chief problems are that of supply and the security of the column on the march and in bivouac. He discusses the action of the various arms and the tactical formations to be adopted. He concludes by pointing out that the small war is not only to punish the enemy but to win over to one's side, he says "we must not forget that our enemy of to-day is our brother of to-morrow."

The second article is by Lt. Riddel Hart, the well known author of the "man in the dark" and "soft spot" theories. At the request of the management of the "Revue Militaire Generale" he has contributed an extremely interesting commentary on the French official regulations for infantry (1920). He criticises from his own point of view and applies his own ideas but he does so in a humble spirit and is in no way dictatorial.

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All communications shall be addressed to the Secretary, United Service Institution of India, Simla.

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All papers must be written in a clear, legible hand, and only on one side of the paper. All proper names, countries, towns, rivers, etc., must, when in manuscript, be written in capital letters. All plans must have a scale on them.

Contributors are responsible, when they send articles containing any information which they have obtained by virtue of their official positions, that they have complied with the provisions of A. R. I., Vol. II., para. 487, and King's Regulations, para. 453.

Anonymous contributions under a *nom-de-guerre* will not be accepted or acknowledged; all contributions must be sent to the Secretary under the name of the writer and the paper will, if accepted, be published under that name unless a wish is expressed for it to be published under a *nom-de-guerre*. The Executive Committee will decide whether the wish can be complied with.

The Committee reserve to themselves the right of omitting any matter which they consider objectionable. Articles are only accepted on these conditions.

The Committee do not undertake to authorise the publication of such papers as are accepted, in the order in which they may have been received.

Contributors will be supplied with three copies of their paper *gratis*, if published. Manuscripts of original papers sent for publication in the Journal will not be returned but, unless he expresses a wish to have them back and pays the postage,

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This Fund enables a British Service (Army) officer, by subscribing from Rs. 2 to Rs. 4 monthly, to assure, in the event of his death while on the Indian Establishment, immediate payment :—

To his widow	Rs. 5,000	to	Rs. 6,000
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Benefits are payable whether the deceased officer's family is residing in India or not.

It is to the advantage of an officer to join the Fund on his first tour of service in India, as otherwise, on joining it in a subsequent tour he would have to pay subscriptions for any previous tours in the country as a married officer.

The Fund (late Queen's Military Widows' Fund) was established in 1820, to assist families of British Service (Army) officers dying in India, and mainly to enable them to return home without delay.

The Fund is controlled by a Committee consisting of and elected by subscribing officers serving at Army Head Quarters, Simla.

For admission and rules apply to :—

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MILITARY WIDOWS' FUND,
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United Service Institution of India.

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His Excellency the Governor of the U. P. of Agra and Oudh.
His Excellency the Governor of the Punjab.
His Excellency the Governor of Burma.
His Excellency the Governor of Bihar and Orissa.
His Excellency the Naval Commander-in-Chief, East Indies.
The General Officer Commanding-in-Chief, Northern Command.
The General Officer Commanding-in-Chief, Southern Command.
The General Officer Commanding-in-Chief, Eastern Command.
The General Officer Commanding-in-Chief, Western Command.

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Ex-officio Members.

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| | *12. Capt. J. G. Smyth, V.C., M.C. |

* Members of the Executive Committee and in addition.

E. HAWARD, Esq.

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... **Miss E. K. SUSSENS.**

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1. The United Service Institution of India is situated at Simla.

2. Officers wishing to become members of the United Service Institution of India should apply to the Secretary. The rules of membership are printed on the opposite page.

3. The reading-room of the Institution, is provided with all the leading newspapers, magazines, and journals of military interest that are published.

4. There is a well-stocked library in the Institution, from which members can obtain books on loan free. Suggestions for new books are solicited, and will be submitted to the Committee. Books are sent out to members V. P. for the postage.

5. The Institution publishes a Quarterly Journal in the months of January, April, July and October which is issued postage free to members in India and to all life members but ordinary members wishing to have their journals sent to any address out of India must pay in advance Re. 1 per annum to cover foreign postage charges.

6. Members and the public are invited to contribute articles to the Journal of the Institution for which honoraria will be awarded by the Executive Committee. Rules for the guidance of contributors will be found on the opposite page.

7. **Members are responsible that they keep the Secretary carefully posted with regard to changes of address.**

8. When on leave in England, members can, under the affiliation rules in force, attend the lectures and make use of the reading-room, etc., of the Royal United Service Institution, Whitehall, on payment of a subscription of 5 shillings per six months.

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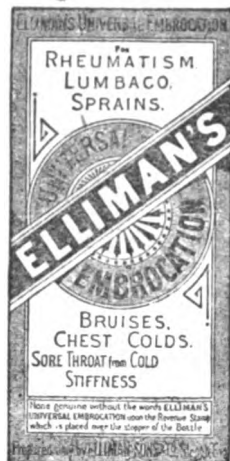
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United Service Institution of India,

APRIL, 1923.

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SECRETARY'S NOTES.**I.—New Members.**

The following new members joined the Institution from the 16th December, 1922 to 15th March, 1923.

Life Members,

Lieut. J. R. Bowring.

Lieut. N. C. Clay.

Lieut. G. A. I. Sanders.

Capt. A. L. Fell.

Capt. H. M. Chambers.

Ordinary Members.

Lieut.-Col. D. C. Crombie.

Lieut. J. H. Tiltman.

Capt. E. R. H. Herbert.

Capt. H. Hornsby.

Major H. S. I. Pearson.

Lieut. J. G. O. Whitehead.

Lt.-Col. Hon'ble C. M. Hore-
Ruthven.

Lieut. R. Smallwood.

Major G. C. S. Ferguson.

Major H. L. Ismay.

Capt. S. W. Bower.

Lieut. H. E. Holloway.

Capt. J. R. James.

Capt. G. Temple.

Col. L. C. Jackson.

Capt. S. St. B. Collins.

Capt. L. C. Palk.

Capt. J. S. Harvey.

Capt. A. Frankland.

II.—Examinations.

Books on Military History and Languages with Dictionaries are available in the Library and the following list of books, which is complete in accordance with the War Office List, may be found useful for reference by officers, studying for promotion examinations or entrance to the Staff College.

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MILITARY HISTORY. (SPECIAL PERIOD).

1. *The Campaign of the British Army in France and Belgium up to 20th November, 1914.*

A.—OFFICIAL ACCOUNT.

Sir John French's Despatches.

B. OTHER BOOKS.

40 days in 1914 by General Maurice (new edition).

The Battle of the Marne, by G. H. Perris.

1914, by Viscount French.

General sketch of the European War, by Belloc.

The Great War, by Colonel Sedgwick

My memoirs, by Ludendorf.

Falkenhayn's Book.

Von Kluck's Book.

British Campaign in France, Flanders, by Conan Doyle, 1914.

Nelson's History of the War.

Ypres, by German General Staff.

Oxford pamphlets. August 1914. The Coming of the War,
by S. Williamson.

Oxford pamphlets. August 1914. No. VII and X.

Times Documentary History of the War, Vol. V. Military.
Part I.

Times Documentary History of the War, Vol. VIII, Part III.

Der Grobe Krieg Schlacht bei Mons.

Der Grobe Krieg Schiacht bei Longwy.

2. *The Palestine Campaign.*

A.—OFFICIAL ACCOUNT.

A brief record of the advance of the Egyptian Expeditionary
Force, 1919.

B. —OTHER BOOKS.

Allenby's final Triumph, by W. T. Massey.

How Jerusalem was won, by W. T. Massey.

3. *Organization of Army since 1868.*

A.—ORGANIZATION OF ARMY SINCE 1868.

History of British Army, by Fortescue.

Outline of Development of British Army, by Genl. Anderson.

Our Fighting Services.....by Sir Evelyn Wood.

Secretary's Notes.**B.—FORCES OF THE EMPIRE.**

The Statesman's Year Book.

Army List.

Articles in Newspapers and Magazines, viz., R. U. S. I.

Army Quarterly, Journal of the U. S. I. of India, etc.

4. *Development and Constitution of the British Empire.*

A.—THE BRITISH EMPIRE.

Encyclopedia Britannica—(Contains much concentrated information).

The Statesman's Year Book.

Whitaker's Almanack.

The Colonial Office List.

The British Empire and its History, by E. G. Hawke.

The Government of British Empire, by Jenks, 1918. ●

The British Empire (6 lectures) by Sir C. P. Lucas, 1918.

The foundation and growth of the British Empire, by J. A. Williamson, 1918.

The beginnings of English Overseas Enterprise, by Sir C. P. Lucas, 1917.

The Government of England, by L. A. Lowell, 1912.

The Expansion of the British Empire, by W. H. Woodward 1900.

Overseas Britain, by E. F. Knight, 1907.

The origin and growth of the English Colonies and of their system of Government, by H. E. Egerton, 1903.

A short History of Politics, by Jenks, 1900.

The English Constitution, by Bagehot, 1909.

The Expansion of England, by Sir J. Seely, 1883.

Introduction of the study of the law of the Constitution, by A. V. Dicey, 1908.

England in the Seven Years' War, Sir J. Corbett, 1907.

Selected Speeches and Documents on British Colonial Policy—
2 Vols. A. B. Keith, 1918.

B.—BOOKS ON SPECIAL PORTIONS OF THE EMPIRE OR WORLD.

The rise and expansion of British Dominions in India, by Sir A. C. Lyall, 1894.

A brief history of the Indian Peoples, by Sir W. H. Hunter, 1907.

The Nearer East, by Hogarth, 1902.

Secretary's Notes.

- Modern Egypt, by Cromer, 1908.
The History of Canada, by W. L. Grant.
Nova Scotia, by B. Wilson, 1911.
Report on British North America, by Sir C. P. Lucas.
The Union of South Africa, by R. H. Brand, 1909.
Short History of Australia, by E. Scott.
History of the Australasian Colonies, by Jenks, 1912.
The English in the West Indies, by J. A. Froude, 1888.
The Lost Possessions of England, by W. F. Lord, 1896.
5. *Military Geography.*
Naval and Military Geography of the British Empire, by Dr. Vaughan Cornish, 1916.
Outlines of Military Geography, by Col. A. C. Macdonnell, 1911.
Introduction of Military Geography, by Col. E. S. May.
Imperial Defence... by Col. E. S. May.
Britain and the British Seas by H. J. Makinder, 1907.
Military Geography, by Macguire.
Imperial Strategy, by Repington.
War and the Empire, by H. Foster.
Historical Geography of British Colonies (Dominions) 7 Vols.
by Sir C. P. Lucas, 1906-17.
Vol. 1 Mediterranean.
Vol. 2 West Indies.
Vol. 3 West Africa.
Vol. 4 South Africa.
Vol. 5 Canada.
Vol. 6 Australia.
Vol. 7 India.
The Influence of Sea Power on History, by A. I. Mahan, 1890.
Historical Geography of the British Empire by Hereford George.

- The Mastery of the Pacific, by A. R. Colquhoun, 1902.
Frontiers.....by C. B. Fawcett, 1918.

III.—Payment for Articles in the Journals.

Articles accepted for publication in the Journal are paid for, and a sum of approximately Rs. 400 is awarded for articles and reviews published in each Quarterly Journal.

IV.—Contributions to the Journal.

With reference to Army Regulations, India, Volume II, paragraph 487, and King's Regulations, paragraph 453, as amended by Army Order 340 of 1913, intending contributors to the Journal of the United Service Institution of India are informed, that action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Committee. Contributors are, therefore, responsible that the sanction of their immediate superior has been obtained, and this should be noted on all articles sent for publication. Articles need not be submitted in duplicate.

Contributors must have their articles either typed or printed.

3. It has been decided to introduce two new items in the Journal headed—

- i. Criticisms.
- ii. Notes on current Military and Naval questions.

The rules for (i) to be—

That the criticism should be headed with the title of the article criticised, and the date of the Journal in which published.

That criticisms should be signed with a nom-de-plume, but that critics must disclose their identity to the Secretary.

The rules for (ii) to be the same as for Articles.

Instructions for the Preparation of Drawings and Plans for Reproduction by Lithography.

These should be in *jet* black. No washes nor ribands of colour should on any account be used.

If it is absolutely necessary to use colour (and these are only permissible in line work or names) the following will reproduce photographically, i.e. :—

Dark red, dark orange, dark green. No other colour should on any account be used.

V.—Library Rules.

1. The Library is only open to members and honorary members of the United Service Institution of India, members are requested to look upon books as not transferable to their friends.

2. No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

3. The United Service Institution of India is open all the year round—including Sundays—from 9 a. m. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

4. A member shall not be allowed, at one time, more than three books or sets of books.

5. Papers, magazines, "Works of reference" or books marked "Not to be taken away," or noted as "Confidential" may not be removed.

6. No particular limit is set as to the number of days for which a member in Simla may keep a book, the Council being desirous of making the library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member it will be re-called.

7. Applications for books from members at out-stations are dealt with as early as possible, and books are despatched per Registered V P. P. They must be returned carefully packed per Registered Parcel Post within one month of date of issue, or application made for permission to retain them for a further period. This will always be granted unless the book is required by another member.

8. If a book is not returned at the end of four months, it must be paid for, without the option of return, if so required by the Executive Committee.

9. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

10. The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

11. A list of all books presented and purchased and also a list of books useful to members studying for the Staff College and promotion Examinations will be found, under Secretary's Notes, in the quarterly issue of the U. S. I. Journal. Members are invited to note any books which they think might with advantage be procured for the Institution. The suggestions will be placed before the Secretary.

12. Members are invited to contribute presents of books, maps, and photographs of naval and military interest. These may be addressed to the Secretary U. S. I. of India, Simla. They will be duly acknowledge

VI.—Library Catalogue.

Under Revision.

Secretary's Notes.**VII.—Gold Medal Prize Essay.****GOLD MEDAL PRIZE ESSAY COMPETITION, 1922-23**

The Council have chosen as the subject for the Gold Medal Essay for 1922-23, the following :—

'TO WHAT EXTENT WOULD THE USE OF LATEST SCIENTIFIC AND MECHANICAL METHODS OF WARFARE AFFECT OPERATIONS ON THE NORTH WEST FRONTIER OF INDIA.'

The following are the conditions of the competition :—

- (1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, and Royal Air Force or Indian Defence Force who are members of the U. S. I. of India.
- (2) Essays must be printed or type-written and submitted in triplicate.
- (3) When a reference is made to any work, the title of such work is to be quoted.
- (4) Essays are to be *strictly anonymous*. Each must have a motto, and enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.
- (5) Essays will not be accepted unless received by the Secretary on or before the 30th June, 1923.
- (6) Essays will be submitted for adjudication to 3 Judges chosen by the Council. When the decisions of the 3 Judges are received the Committee will submit the four essays, placed first in order by the Judges, with their recommendations on the award of the Gold Medal to the Council, who will decide whether the Medal is to be awarded and whether the essay may be published.
- (7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October, 1923.
- (8) All essays submitted are to become the property of the United Service Institution of India, *absolutely* and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.
- (9) Essays should not exceed about 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.

By order of the Council,

SIMLA?
30th August, 1922. }

F. A. FINNIS, LIEUT.-COL.,
Secretary, U. S. I. of India.

Secretary's Notes.

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VIII.—Army List pages.

The U. S. I. is prepared to supply members and units with manuscript or type-written copies of Indian Army List pages, at the following rates :—

Manuscript, per page Re. 1.

Type written, per page Rs. 2.

IX.—Books.

Books Purchased.

	<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
1	An Account of My Life ...	1912	H. H. Nawab Sultana Jahan Begum.
2	With the Thackeray's in India ...	1897	Sir W. Hunter.
3	Insurrection in Mesopotamia of 1920 ...	1922	A. Haldane.
4	Pomp of Power ...	N. D.	Anonymous
5	The Macedonian Campaign, 1915-18 ...	1922	Luige Villari.
6	Up The Country (2 Vols.) ...	1866	Hon. E. Eden.
7	British Finance during and After the War, 1914-21 ...	1921	A. H. Gibson and A. W. Kirkaldy.
8	Political Economy ...	1920	C. Gide.
9	Aviation in Peace and War ...	1922	Major-General Sir F. H. Sykes.
10	Accounting ...	1922	S. S. Dawson.
11	The Empire at War, Vol. I (other Vols. to follow) ...	1921	Sir C. Lucas.
12	Sir Douglas Haig's Command, 2 Vols. ...	1922	G. A. B. Dewar and Lt.-Col. J. H. Boraston.
13	Sir Douglas Haig's Despatches (I Vol. and 1 case of maps) ...	1920	Lt.-Col. J. H. Boraston.
14	On Hazardous Service ...	1921	Mervyn Lamb.
15	On Secret Patrol in High Asia ...	1922	Capt. L. V. S. Blacker.

Secretary's Notes.

	<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
16	Life of Genl. The Hon'ble James Murray. (A Balder of Canada)	1921	Maj.-Genl. R. H. Mahon
17	India Old and New ...	1921	Sir Valentine Chirol.
18	Sir Eyre Coote ...	1922	Compiled by Col. H. C. Wylly.
19	The Russian Turmoil ...	N.D.	Genl. Denikin.
20	The New World, or Problems in Political Geography ...	1923	J. Bowman.
21	British Railways and the Great War ...	1921	E. A. Pratt.
22	The New World of Islam ...	1922	L. Stoddard.
23	Two years in Kurdistan, Experiences of a Political Officer, 1918-20	1921	H. R. Hay.
24	Rudyard Kipling's Verse 1885-1918 ...	N.D.	Rudyard Kipling.
25	An Introduction to Co-operation in India ...	1922	C. F. Strickland.

Books Presented.

	<i>Title.</i>	<i>Presented by—</i>
1	Military Mining Work of the R. E. in the European War 1914-18. (Pub. 1922) ...	Secretary, R. E. Institution, Chatham.
2	Exploration in the Eastern Kara-Koram and the Upper Yarkand Valley. (Pub. 1922) ...	Govt. of India. (Official).
3	Notes on Working for Admission to the Staff College. (Bt. Major A. V. T. Wakely). (Pub. 1923) ...	Sifton Praed & Co., London.
4	A Chapter of Misfortunes (Major-General W. D. Bird). (Pub. 1923) ...	Forster Groom & Co., London.
5	Defence of India (A Vincent). (Pub. 1922)	Oxford University Press, Bombay.

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Books Ordered.

<i>Title.</i>	<i>Author.</i>
1 The Life and Letters of Walter H. Page ...	B. J. Henrick.
2 The Examiner	Dr. Fitzgerald Lee.
3 Outlines of Modern European History ..	J. D. Rogers.
4 Mount Everest (Reconnaissance 1921, The)	Lt.-Col. C. K. Howard-Bury.
5 Kashmir	Sir F. Younghusband.
6 Manual of Egyptian Archaeology ...	Sir G. Maspero.
7 Popular Stories of Ancient Egypt ...	Do.

X.—

The Institution has for disposal a number of old copies of Staff College Examination papers with maps enclosed, 1906 and upwards, at annas 4 per copy.

XI.—Correction.

In the last line of page 102 of January Journal—
for "Colonel Swayne."
read "Colonel Swann."

XII.—

The name of Lieut.-Col. A. B Beauman was erroneously omitted as being the Author of the Article "A River Battle" that appeared in the Journal for January, 1923.

United Service Institution of India.

PRIZE ESSAY GOLD MEDALISTS.

(With rank of Officers at the date of the Essay).

- 1872...ROBERTS, Lieut.-Col. F. S., V.C., C.B., R.A.
1873...COLQUHOUN, Capt. J. S., R.A.
1874...COLQUHOUN, Capt. J. S., R.A.
1879...ST. JOHN, Maj. O. B. C., R.E.
1880...BARROW, Lieut. E. G., 7th Bengal Infantry.
1882...MASON, Lieut. A. H., R.E.
1883...COLLEN, Maj. E. H. H. S.C.
1884...BARROW, Capt. E. G., 7th Bengal Infantry.
1887...YATE, Lieut. A. C., 27th Baluch Infantry.
1888...MAUDE, Capt. F. N., R.E.
 YOUNG, Maj. G. F., 24th Punjab Infantry (specially awarded a silver medal).
1889...DUFF, Capt. B., 9th Bengal Infantry.
1890...MAGUIRE, Capt. C. M., 2nd Cav., Hyderabad Contingent.
1891...CARDEW, Lieut. F. G., 10th Bengal Lancers.
1893...BULLOCK, Maj. G. M., Devonshire Regiment.
1894...CARTER, Capt. F. C., Northumberland Fusiliers.
1895...NEVILLE, Lieut.-Col. J. P. C., 14th Bengal Lancers.
1896...BINGLEY, Capt. A. H., 7th Bengal Infantry.
1897...NAPIER, Capt. G. S. F., Oxfordshire Light Infantry.
1898...MULLALLY, Maj. H., R.E.
 CLAY, Capt. C. H., 48rd Gurkha Rifles (specially awarded a silver medal).
1899...NEVILLE, Col. J. P. C., S.C.
1900...THUILLIER, Capt. H. F., R.E.
 LUBBOCK, Capt. G., R.E. (specially awarded a silver medal).
1901...RANKEN, Lieut.-Col. G. P. P., 46th Punjab Infantry.
1902...TURNER, Capt. H. H. F., 2nd Bengal Lancers.
1903...HAMILTON, Maj. W. G., D.S.O., Norfolk Regiment.
 BOND, Capt. R. F. G., R.E., (specially awarded a silver medal).
1904...MACMUNN, Maj. G. F., D.S.O., R.F.A.
1905...COCKERILL, Maj. G. K., Royal Warwickshire Regiment.
1907...WOOD, Maj. E. J. M., 99th Deccan Infantry.
1908...JEUDWINE, Maj. H. S., R.A.
1909...MOLYNEUX, Maj. E. M. J., D.S.O., 12th Cavalry.
 ELSMIE, Maj. A. M.S., 56th Rifles, F.F., (specially awarded a silver medal).
1911...MR. D. PETRIE, M. A., Punjab Police
1912...CARTER, Maj. B. C., The King's Regiment.
1913...THOMSON, Maj. A. G., 58th Vaughan's Rifles, (F.F.).
1914...BAINBRIDGE, Lieut.-Col. W. F., D.S.O., 51st Sikhs, (F.F.)
 NORMAN, Maj. C. L., M.V.O., Q. V. O., Corps of Guides (specially awarded a silver medal).
1915...No Award.
1916...CRUM, Maj. W. E., V. D., Calcutta Light Horse.
1917...BLAKER, Maj. W. F., R. F. A.
1918...GOMPERTZ, Capt. A. V., M. C., R. E.
1919...GOMPERTZ, Capt. M. L. A., 108th Infantry.
1920...KEEN, Lt.-Col. F. S., D.S.O., 2/15 Sikhs.
1921...No Award.
1922...MARTIN, Maj. H. G., D.S.O., O.B.E., R.F.A.

MACGREGOR MEMORIAL MEDALS.

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June .—

(a) For officers—British or Indian—silver medal.

(b) For soldiers—British or Indian—silver medal, with Rs. 100 gratuity.

3. For specially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for special good work.

4. The award of medals is made by His Excellency the Commander-in-Chief as Vice-Patron, and the Council of the United Service Institution who were appointed administrator of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.

Note.

(i) Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

(ii) When the work of the year has either not been of sufficient value or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MacGregor Memorial Medalists.

(With rank of Officers at the date of the Award).

1889...BELL, COL. M.S., V.C., R.F., (specially awarded a gold medal.)

1890...YOUNGHUSBAND, Capt. F. E., King's Dragoon Guards.

*N. B.—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxillary Forces, such as the Volunteers and Corps under Local Governments, Frontier Militia Levies and Military Police, also all ranks serving in the Imperial Service Troops.

MacGregor Memorial Medalists—*contd.*

- 1891...**SAWYER**, Major H. A., 45th Sikhs.
RAMZAN KHAN, Havildar, 3rd Sikhs,
- 1892...**VAUGHAN**, Capt. H. B., 7th Bengal Infantry.
JAGGAT SINGH, Havildar, 19th Punjab Infantry,
- 1893...**BOWER**, Capt. H., 17th Bengal Cavalry, (specially awarded a gold medal).
FAZALDAD KHAN, Dafedar, 17th Bengal Cavalry.
- 1894...**O'SULLIVAN**, Major G. H.W., R.E.
MULL SINGH, Sowar, 6th Bengal Cavalry.
- 1895...**DAVIES**, Capt. H. R., Oxfordshire Light Infantry.
GANGA DYAL SINGH, Havildar. 2nd Rajputs.
- 1896...**COCKERILL**, Lieut. G. K., 28th Punjab Infantry.
GHULAM NABI, SEPOY Q. O. Corps of Guides.
- 1897...**SWYAYNE**, Capt. E. J. E., 16th Rajput Infantry.
SHAHZAD MIR, Dafedar, 11th Bengal Lancers.
- 1898...**WALKER**, Capt. H. B., Duke of Cornwall's Light Infantry
ADAM KHAN, Havildar, Q. O. Corps of Guides.
- 1899...**DOUGLAS**, Capt. J. A., 2nd Bengal Lancers.
MIHR DIN, Naik, Bengal Sappers and Miners.
- 1900...**WINGATE**, Capt. A. W. S., 14th Bengal Lancers.
GURDIT SINGH, Havildar, 45th Sikhs.
- 1901...**BURTON**, Maj. E. B., 17th Bengal Lancers.
SUNDAR SINGH, Colour Havildar, 31st Burma Infantry.
- 1902...**RAY**, Capt. M. R. E., 7th Rajput Infantry.
TILBIR BHANDARI, Havildar, 9th Gurkha Rifles.
- 1903...**MANIFOLD**, Lieut.-Col. C. C., I.M.S.
GHULAM HUSSAIN, Lance-Dafedar, Q. O. Corps of Guides.
- 1904...**FRASER**, Capt. L. D., R.O.A.
MOGHAL BAZ, Dafedar, Q. O. Corps of Guides.
- 1905...**RENNICK**, Maj. F., 40th Pathans, (specially awarded gold medal).
MADHO RAM, Havildar, 8th Gurkha Rifles
- 1906...**SHAHZADA AHMAD MIR**, Risaldar, 38th Jacob's Horse.
GHAFUR SHAH, Lance-Naik, Q. O. Corps of Guides Infantry.
- 1907...**ANGLE**, Capt. M. C., 92nd Punjabis.
SHEIKH USMAN, Havildar, 103rd Mahratta Light Infantry.
- 1908...**GIBBON**, Capt. C. M., Royal Irish Fusiliers.
MALANG, Havildar, 56th Punjab Rifles.
- 1909...**MUHAMMAD RAZA**, Havildar, 106th Pioneers.

MacGregor Memorial Medalists—contd.

- 1910...**SYKES, Maj. P. M., C.M.G.**, late 2nd Dragoon Guards (specially awarded a gold medal).
TURNER, Capt. F. G., R.E.
KHAN BAHADUR SHER JUNG, Survey of India.
- 1911...**LEACHMAN, Capt. G. E.**, The Royal Sussex Regiment.
GURMUKH SINGH, Jemadar, 93rd Burma Infantry.
- 1912...**PRITCHARD, Capt. B.E.A.**, 83rd Wallahjabad Light Infantry, (specially awarded a gold medal).
WILSON, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
MOHIBULLA, Lance-Dafedar, Q. V. O. Corps of Guides.
- 1913...**ABBAY, Capt. B. N.**, 27th Light Cavalry.
SIRDAR KHAN, Sowar, 39th (K.G.O.) Central India Horse.
WARATONG, Havildar, Burma Military Police (specially awarded a silver medal).
- 1914...**BAILEY, Capt. F. M., I.A.** (Political Dept.)
MORSHEAD, Capt. H. T., R.E.
HAIDAR ALI, Naik, 106th Hazara Pioneers.
- 1915...**WATERFIELD, Capt. F. C.** 45th Rattray's Sikhs.
ALI JUMA, Havildar, 106th Hazara Pioneers.
- 1916...**ABDUR RAHMAN, Naik** 21st Punjabis.
ZARGHUN SHAH, Havildar, 58th Rifles (F.F.) (Specially awarded a silver medal).
- 1917...**MIAN AFRAZ GUL, Sepoy**, Khyber Rifles.
- 1918...**NOEL, Capt. E. W. C.**, Political Department.
- 1919...**KEELING, Lt.-Col. E. H., M.C. R.E.**
ALLA SA, Jemadar, N. E. Frontier Corps.
- 1920...**BLACKER, Capt. L. V. S., Q. V. O.** Corps of Guides.
AWAL NUR, C. Qm. Havildar, 2nd Bn. Q. V. O. Corps of Guides.
(Special gratuity of Rs. 200.)
- 1921...**HOLT, MAJOR A. L.**, Royal Engineers.
SHER ALI, Sepoy No. 4952, 106th Hazara Pioneers.
- 1922...**ABDUL SAMAD SHAH, Capt. O.B.E.**, 31st D.C.O. Lancers.
NUR MUHAMMED, Lance-Naik, 1st Guides Infantry F. F.

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"OPERATIONS OF 4TH CAVALRY DIVISION IN PALESTINE AND SYRIA IN SEPTEMBER, 1918."

A LECTURE DELIVERED AT THE STAFF COLLEGE, QUETTA, IN 1922

BY

Captain R Denning, 19th K.G.O. Lancers

All references to map attached.

General situation, September, 1918.

1. The British front line at the beginning of September ran approximately as follows :—

North end of DEAD SEA—up the JORDAN about 15 miles, thence west to where the AUJAH comes out of the JERUSALEM Hills (held by Desert Mounted Corps, *i.e.*, 4th and 5th Cavalry Divisions, Australian Mounted and Anzac Mounted Divisions and Indian Imperial Service Infantry Brigade), thence through SIDJIN on the JERUSALEM-NABLUS Road, about 15 miles south of NABLUS to MEJDEL YUBA midway between TULKERAM and LUDD, to the sea some 12 miles north of JAFFA (held by the 20th and 21st Corps, which were composed of 53rd, 50th, 54th, 3rd and 7th Indian 75th and 60th Divisions).

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The force had been re-organized early in 1918, a large portion of its British personnel going to France, and being replaced by Indians.

Since then no operations on a large scale had taken place, but the Turks had been continually harassed in minor operations all along the front, and a policy of wearing down their moral relentlessly pursued.

Courses open to G.H.Q.

2. General Allenby had three plans of attack open to him.

(a) On the right (East of the JORDON) where success would effect a junction with the Arabs, he would get possession of the rich and fertile Hauran and Damascus, and cut the enemy's railway communications. The country, however, was very difficult, especially to start with, and railway and road communications would be very difficult to build up from the rear, as the advance proceeded. The enemy moreover had been twice attacked on this front and showed considerable signs that he feared and was on the look out for an attack here.

(b) In the centre, across the difficult Judæan hills, with a series of good enemy positions in rear of their front line. Many troops would be required for success here and an advance be slow.

(c) On the left. The country here would allow of the fullest use being made of General Allenby's preponderance in mounted troops, and thus provide an opportunity for a rapid and decisive blow.

The sea could be used *via* Haifa as a line of supply, and only a short length of road and railway was required to join up our roads and railways from LUDD to the enemys at TULKERAM.

This was the plan adopted.

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Means taken to ensure surprise.

3. To ensure success surprise was essential and the following are some of the precautions taken to conceal the movements of troops and flank of attack.

As has been mentioned, the Turks were known to be fearful of an attack on their east flank, and to play on this FAST'S Hotel at JERUSALEM was ordered to be vacated by civilians, signal communications were put in and the rooms labelled for G. H. Q. Staff.

Dummy horse lines were made in the JORDAN Valley (4 sticks and an Army Blanket representing our noble friend). This was successful, as the following extract from an enemy air reconnaissance of September 17th captured later at NAZARETH shows, "Far from their being any diminution in the cavalry in the JORDAN Valley, there are evidences of 23 more squadrons."

Troops were moved east by day and west by night.

As the AUJA, north of JAFFA would have to be bridged, and undue activity immediately preceding operations might cause suspicion, bridging schools were established there, 6 weeks before, to get the Turks used to seeing bridges across, and two bridges were built and swung along the bank concealed in long grasses.

All new roads made were covered with horse litter.

No mention was made of moves or operations by telegraph or telephone and troops were not told until 48 hours before.

During and after the concentration moves were made by night and troops concealed in orange and olive groves by day. Absolutely necessary movements, such as those of ration parties, etc., were carried out between 12-00 and 14-00, when the R. A. F. had strong patrols up, and police were posted with field glasses and whistles to warn everyone to remain still, if an enemy aeroplane approached.

Horses were watered by buckets from wells in the groves, and cooking was done with solidified alcohol. The R. A. F. obtained complete superiority over the enemy, and, just before operations began, a "Handley Page" bombed AFULE and broke up the German G. H. Q. communications very effectively,

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The measures taken were very effective and surprise was complete.

Preparation complete. September, 18th.

4. By the evening of September, 18th. All preparations were complete and troops in their positions, ready for the great advance. The front was held as follows :—

JORDAN VALLEY, CHAYTOR'S FORCE. Anzac Mounted Division, 20th Indian Imperial Service Brigade, with 4 Jewish and 10 Indian battalions.

12 miles east and west of JERUSALEM-NABLUS Road, } 20th Corps, (53rd and 10th Divisions.)

Thence to the sea, 21st Corps (right to left 54th, (and French Detachment) 3rd Lahore, 75th, 7th Meerut and 60th Divisions) on a front of about 15 miles, 4 of these 5 divisions being within 7 miles of the sea.

In rear of these 4 divisions, Desert Mounted Corps (4th and 5th Cavalry and Australian Mounted Divisions) was concealed in the orange groves north of Jaffa, the 4th Cavalry Division behind the 7th, and 5th Cavalry Division behind the 60th Division.

5. The plan was as follows :—

21st Corps was to attack at 04.45 on the 19th, the main attack being on the front within 7 miles of the sea. This attack was to pivot on the right, drive the Turks east and north-east and end up with the corps facing east holding the foot-hills from MEJDEL YUBA to TUL KERAM, with its back to the sea.

The Desert Corps was to move north up the lane thus formed, avoid becoming involved in fighting with the Turkish Infantry on their east flank, and move with the utmost rapidity over the CARMEL Range *via* MUSMUS and JARAK, seize NAZARETH where Limon Von Sanders and German G. H. Q. was situated and occupy the plain of ESDRAELON and VALLEY of JEZREEL, down to the JORDAN at BEISAN, 40 miles in rear of the Turkish 7th and 8th armies, and bar their retreat.

These two armies would then be driven by our infantry into the arms of the expectant horsemen,

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The next phase was to move east of the JORDAN and effect a junction with FAISUL and his Arabs at DERA'A, thus cutting off the Turkish 2nd and 4th Armies, which were to be engaged in front by CHAYTOR'S force from JERICHO; and advance on DAMASCUS.

The plan was bold, simple and far reaching and in accordance with the principle of attacking the enemy's communications sufficiently far back to be clear of all his front line formations and reserves.

Description of coast.

6. The country over which the cavalry had to move, as far as the CARMEL Range, was the coastal plain, 7 to 10 miles broad, rolling sandy downs and sand-dunes covered with stiff rank grass, with wide stretches of black cotton soil, baked hard and covered with thistles; ideal country, except for the heavy sand in places, and no obstacles.

The foothills were rough and rocky, and the CARMEL Range could only be crossed by large bodies by the roads through MUSMUS and JARAK, and it was found later that the latter road was impassable for wheels.

The plain of ESDRAELON and Valley of JEZREEL were chiefly black cotton soil, baked hard, and with large cracks which rendered rapid movement, generally speaking, very difficult.

A general idea of the situation has now been given and the narrative will be confined hereafter to the operations of the 4th Cavalry Division.

September 16th, 10th and 11th Cavalry Brigades leave the JORDAN Valley.

7. On September 16th the 4th Cavalry Division concentrated in the olive groves at RAMLEH. The 10th and 11th Cavalry Brigades, less their Yeomanry regiments, came from the JORDAN Valley, where they had remained up to the last moment, for purposes of secrecy, and the remainder of the division from the MEJDEL Area, where they had been training and refitting.

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Strenuous administrative preparations.

8. The 16th and 17th September were very busy days for these two brigades, and they were fully occupied in readjusting equipment and stores and in the necessary details of preparation for the offensive.

Horses and mules had to be drawn, special pack equipment was required, pioneer and explosive troops had to be organized and a great deal of abnormal labour was expended in the return of surplus kit, accumulated in the stationary warfare of the JORDAN Valley, to the ordnance depot. Reserve, special and extra rations had to be drawn, and provision made for loading on man, animal and transport.

All dispensable equipment and clothing, including great coats, was dumped at LUDD. The night marches from the JORDAN Valley had been tedious, and all these essential duties, added to the annoyance of flies, dust, and other worries of the hot weather, afforded little chance of real rest to the troops.

Condition of Troops.

In addition, they had spent many weary weeks of the summer in the JORDAN Valley, 1,000 feet and more below sea level, perpetually swallowing dust and flies, and tormented by the ever ready mosquitoes, who, in return for the persistent aggression of our medical authorities, counter attacked the troops.

In spite of all this, their spirits and moral on the eve of operations were of the best, and the animals were very fit.

Plan divulged to subordinate leaders.

9. At 10-00 on 17th September a conference of commanding officers was held at Divisional Headquarters and details of the forthcoming operations were disclosed and explained.

At 10-30 General Allenby arrived and made a short address to the assembled commanding officers.

The afternoon was employed in the distribution of maps and issue of final orders to units, and it was not until now that squadron and troop leaders became aware of the plan of action.

At 10-00 the division marched to the SELMEH Area, which was reached by 02-00 on the 18th.

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September 18th. A day of rest for men and animals.

10. On the 18th the division remained halted for the day and night in the orange groves, preparations were complete, and the division obtained a very welcome and much needed rest, before the coming storm.

Pioneer parties.

Just before dusk Regimental Pioneer parties were concentrated and all arrangements completed for cutting the wire and marking the track through the enemy's defences on the 19th.

Liaison with Infantry.

4th Cavalry D.H. Q. advanced, report centre was established at 22-30 in close touch with 7th Indian Division Headquarters, through whose infantry they were to pass on the morrow.

Organization of Division.

11. On September 19th the division was organized as follows:—(a) Fighting troops. (b) Rear D.H.Q. (D.A.A.G.) (c) A echelon 1st line transport of all units, and divisional ammunition column, under a specially detailed officer. Practically a column of limbered G.S. wagons.

(d) B echelon (of units) and divisional train, immobile or slow moving portion of field ambulances, D.A.D.O.S. and post offices, under O.C. Train. Practically a column of G.S. wagons 1 squadron C.I.H. acted as escort to A and B echelons. (c) Camel canvoy carrying one day's rations and forage for the division.

12. By 08-00 on 19th the fighting troops had crossed the AUJA at JERISHEH and HADRAH, watered on the north bank, and formed in a position of readiness some 4,000 yards north of the river, approximately on the line of our gun positions.

September 19th, position of readiness, 08-00.

The AUJAH was crossed by two pontoon bridges, one at each place, about 50 yards in length, and no mishap occurred to any animals or transport, throughout the division.

Artillery bombardment.

13. Meanwhile at 04-30 on the 19th, the artillery bombardment had commenced and lasted 15 minutes.

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This bombardment was a heavy one for Palestine, but very light judged by Western Front standards. The infantry attacked at 04-45, and were immediately successful.

Track through the gap.

The Pioneer parties reached our own wire at 07=00, and as the progress of our infantry was quicker than expected, they moved forward under cover of the infantry advance, cutting the wire and flagging and preparing the track through the enemy defences.

Division moves through the infantry.

14. Soon after arrival in its position of readiness, the 4th Cavalry Division was ordered to move up to the gap in our wire, an advance of some 4,500 yards, and await orders. At 08-40 the G.O.C. 4th Cavalry Division was with the G.O.C. 7th Division at 7th Division Headquarters at TABSOR, and it was decided that the cavalry could pass through.

The Divisional Commander (Major General Sir G. de S. Barrow), met the head of his division, which had then arrived within a few hundred yards of the gap, and the head of the division passed through at 08-58, moving in column of troops.

15. The Division moved rapidly north and by 11-15 had passed the ZERKIYEH swamp. A short halt was made on the BUJ EL ATOT—MUGHAIR Line.

KAKON-LIKTERA switch. Charge of 36th Horse.

After passing the NAHR ISKANDERUN, a swampy and difficult passage for wheels, the advanced guard came under slight rifle fire from the KAKON-LIKTERA switch. The 36th Jacobs' Horse galloped the position at once, taking 250 prisoners.

By 16-30 the line JELAMEH-TELLED DHRUR was occupied; this was the first general objective of the Desert Mounted Corps.

Touch with 5th Cavalry Division—TELL ED DHRUR.

The leading troops of the 5th Cavalry Division, on the left, had reached the line TELLED DHRUR-LIKTERA by 11-00, and the division was halting till 18-15.

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16. At 18-00 the division was disposed as follows :—

10th Cavalry Brigade moving on KERKUR—12th Cavalry Brigade JELAMEH—Divisional Headquarters and 11th Cavalry Brigade, TELLED DHRUR.

Position at 18-00—KERKUR.

At this hour orders were issued by the Divisional Commander for the advance through the MUSMUJ Pass on EL LEJJUN (MEGIDDO).

The 10th Cavalry Brigade was to leave KERKUR at 22-00 followed by the remainder of the division.

About 20-45 this brigade sent forward the 2nd Lancers and No. 11 L. A. M. Battery to occupy the cross roads at K. H. ARAH.

Meanwhile horses were watered and fed and nose-bags refilled from stores captured at KERKUR.

17. It was a bright moonlight night and the 2nd Lancers moved as follows :—

Advance Guard, 1 squadron and No. 11 L.A.M. Battery.

Main Body. 1 squadron—1 sub-section, M.G.'s.—2 squadrons.

2nd Lancers to KH. ARAH.

The advanced guard was strung out in troops at about 100 yards distance, the armoured cars following the leading troop. The main body followed the advanced guard at about 400 yards distance.

Movement off the road was impossible and the regiment moved in column of $\frac{1}{2}$ sections.

In the event of being fired on, the leading troop had orders to charge at once and try to rush the opposition.

Enemy transport captured.

18. Shortly after starting, the advanced guard came on the rear of a column of transport and stragglers.

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These surrendered without fighting and about 500 prisoners were sent back to KERKUR. KH-ARAH was occupied by 23-30 without further incident.

Delay of 10th Cavalry Brigade.

19. At 21-40 the Divisional Commander arrived at H. Q. 10th Cavalry Brigade, KERKUR, and found that owing to delay they would not be able to move at 22-00. He ordered them to move as soon as possible and motored on to the 2nd Lancers at KH. ARAH reaching there about 23-30, and ordered them to move at once with 11 L.A.M. Battery, on LEJJUN and make good the exit from the Pass.

Bad reconnaissance. 10th Cavalry Brigade lose their way.

20. On his return to the division, the divisional Commander found that the 10th Cavalry Brigade, who had moved at 23-00, had taken the wrong road and was being followed by the remainder of the division.

He thereupon put the 12th Cavalry Brigade, who were in rear of the division, on the right road, and directed them to follow the 2nd Lancers up the Pass, and gain the heights at LEJJUN before dawn.

G.O.C's. action.

As will be seen later the energetic personal action of the Divisional Commander was responsible for subsequent success, as every moment was of value.

September 20th, 03-00. LEJJUN captured. Turks advanced guard caught unawares. •

21. At 03-00 the 2nd Lancers reached LEJJUN, and captured about 100 Turks sitting round a fire with their arms piled, at the exit from the Pass; this party was probably the advanced guard of a regiment sent from AFULE to hold the Pass, the main body being encountered later in the morning.

At 04-05 the 12th Cavalry Brigade reached LEJJUN and by 06-00 the remainder of the division had cleared the MUSMUS Pass.

05-30 Advance on AFULE.

22. At 05-30 the 2nd Lancers with No. 11 L. A. M. Battery and one section, 17th M. G. Squadron, moved on AFULE. On

getting down into the plain, the advanced troops came under fire and it was evident that the enemy were astride the AFULE-LEJJUN road in some strength. One squadron, the armoured cars, and M. G. Section held the enemy in front, whilst the rest of the regiment charged promptly from the flank. Although the enemy fired to the last and had more than 6 M. Gs. in action, the charge got home. 46 Turks were killed and wounded and 470 prisoners taken.

The 2nd Lancers had one man wounded and 3 horses killed.

A description of this action is given in Appendix A.

Capture of AFULE.

23. By 08-00 the 12th Cavalry Brigade had occupied AFULE capturing large quantities of war material including 10 locomotives, 50 rolling-stock and 3 aeroplanes. 12 lorries driven by Germans, tried to escape to BEISAN, but were captured by the armoured cars. A German aviator, thinking the place was still held by the Turks landed at the Aerodrome. Discovering his mistake, the pilot tried to get away, but was shot down. By 09-00 all railway lines bifurcating from AFULE were cut.

Advance to BEISAN.

24. At 12-00 the division was concentrated at AFULE, and at 13-00 moved down the valley of JEZREEL on BEISAN leaving a regiment to close the exits north, until relieved by the 5th Cavalry Division, who had entered NAZARETH at 05-30 and were astride the ESDRAELON PLAIN between AFULE and HAIFA.

BEISAN was occupied at 16-30, after slight opposition. Some 800 prisoners and 35'9" guns were captured. The latter were manned by our artillery and put into action to command the road into BEISAN from the south. We now held the gateway from the deserts of Arabia into Palestine, held before us by Canaanites, Egyptians, Jews, Assyrians, Persians, Greeks, Romans Crusaders, Saracens and Turks.

By 18-00 on the 20th the division was concentrated at BEISAN, less the 19th Lancers, who moved at 19-00 from AFULE across the mountains to JISR EL MUJAMIE.

After a difficult and strenuous march over almost impassable country, this regiment occupied JISR MUJAMIE, and by 08-00 on

the 21st instant the important railway bridge over the JORDAN there was prepared for demolition, should necessity arise.

25. The division had on its arrival at BEISAN at 18-00 on the 20th, covered 85 miles in 34 hours, and with the exception of the fords over the JORDAN had closed all exits for the 7th and 8th Turkish armies. Only 26 horses had been lost in the whole division.

The line BEISAN-AFULE was piquetted and during the night some 700 prisoners were taken, according to some of whose statements the Turkish command was quite unaware of our occupation of BEISAN.

Approach of enemy from NABLUS, evening 21st September.

26. About dusk on the the 21st, the 10th Cavalry Brigade, who were on outpost were attacked about 2 miles south of BEISAN by the advanced guard of a large enemy force coming from NABLUS.

Moonlight charge by C. I. H.

The enemy succeeded in penetrating a part of the DORSET YEOMANRY position, but were charged in the moonlight by a troop of 38th C. I. H., who captured 158 prisoners, and the enemy showed no further disposition to fight.

The Hants Battery R. H. A. had meanwhile opened fire on the approaches from NABLUS and this evidently deterred the large Turkish rabble that was following from supporting the advanced guards assault.

During the night some 3,000 Turks and Germans surrendered. *September 23rd, 06-00.*

27. At 06-00 on the 23rd the 11th Cavalry Brigade moved down both banks of the JORDAN to cut off the retreat of the 7th Turkish Army across the river.

11th Cavalry Brigade moved south down the JORDAN,

At 08-30 a force of the enemy infantry and M. Gs. was met holding an advanced position covering the ABU NAJ FORD, which ran through dense scrub. As a result of reconnaissance, it

was estimated that this position was held by some 1,000 infantry and 30 M. Gs., with a few mounted men. Its centre was on a mound with some houses, which was thought to be held by about half the enemy's force.

Charge of 29th Lancers.

Two squadrons 29th Lancers gallantly charged this position, capturing 800 prisoners and 25 machine guns. For this action the British officer in Command was awarded the D. S. O. and the Indian officer, who attacked the mound and was killed in doing so, was awarded the V. C.

Meanwhile the Middlesex Yeomanry who were moving round the western flank of the enemy's advanced guard found the enemy in large numbers on the ford itself, and the 36th Jacob's Horse were held up on the east bank.

The Hants battery came into action (in the open owing to the nature of the ground), but was immediately silenced by two enemy batteries, which had remained concealed till now. Every gun of the Hants battery was hit and the personnel forced to leave the guns.

Middlesex Yeomanry charge enemy's guns.

A squadron of the Middlesex Yeomanry, however, had succeeded in getting across south and in rear of these batteries, charged the guns and put them out of action.

The enemy then gave way and suffered very severely from machine gun and Hotchkiss fire, abandoning enormous quantities of stores

The Brigade bivouacked the night at AINEL BEIDA.

September 24th.

28, Continuing their southward march on the 24th, the 11th Cavalry Brigade encountered a hostile advanced guard, about 1,200 strong, with numerous machine guns marching down the Wadi EL MALEH,
Wadi EL MALEH.

The advanced guard was forced back on to its main body and the column thrown into hopeless confusion. The Turks fled for the ford over the JORDAN, which was converted into a

veritable shambles, being played upon by the Hants Battery, at under 3,000 yards, and our machine guns and Hotchkiss guns from the banks.

Some 6,000 prisoners, including RUSHDI BEY, the Commander of the 16th Turkish Division, numberless machine guns, ponies and transport animals were captured. It was quite impossible to clear the battle-field.

29. On the 25th, after ensuring that there were no large formed bodies left as far as JISR ED-DAMIE, the 11th Cavalry Brigade returned to BEISAN.

Rout of the Turkish 7th and 8th Armies.

The Turkish 7th and 8th armies having been accounted for, it was now the turn of the 2nd and 4th east of the JORDAN. *The move east of the JORDAN. September 26th.*

30. On September 25th the 10th Cavalry Brigade moved north to JISR MUJAMIE, and moved east on IRBID on the 26th, followed by the remainder of the division.

The road led through bare precipitous mountains, and in many places was indistinguishable from the rock-strewn country around. In one place a bridge had to be made over the Wadi ZAKAR, and generally speaking it was impossible to move at more than a walk.

Attack on IRBID unsuccessful.

The advanced guard (2nd Lancers and sub-section machine guns) reached the crest of the plateau on which IRBID is situated at 16-45. The enemy were found to be holding BEITRAS, IRBID and ZEBDA. The 2nd Lancers made a gallant attempt to gallop IRBID across the very difficult stony country, but were beaten back with considerable casualties.

The C. I. H. supported the 2nd Lancers in a further attack, but when darkness fell the enemy still remained in possession of IRBID.

Enemy leave IRBID during the night.

At dawn the next morning, however, the enemy were found to have retired towards MEZERIB during the night. It was estimated that some 5,000 enemy infantry and numerous machine guns had been holding IRBID.

Situation of division; midnight September 26th—27th.

31. At midnight the division was situated as follows :—

10th Cavalry Brigade IRBID, 12th Cavalry Brigade ES SHINI, D. H. Q., and 11th Cavalry Brigade JISR MUJAMIE.

Advance on ER REMTE.

32. Early on the 27th the 10th Cavalry Brigade moved on ER REMTE, and at 10-45 the advanced guard (Dorset Yeomanry) came in touch with the enemy who were holding ER REMTE in strength with many machine guns.

By 11-50 the Dorset Yeomanry, who had been reinforced by the C. I. H., were in possession of ER REMTE. The C. I. H. executed a highly successful charge in the course of this action capturing 8 machine guns and 150 prisoners, with the loss of a few men and half-a-dozen horses.

By the evening of the 27th, the 10th Cavalry Brigade were on the eastern edge of the hills overlooking DERA A, Divisional Headquarters and 12th Cavalry Brigade were at ER REMTE and 11th Cavalry Brigade at IRBID.

During the night touch was gained with the Sherifian Army.

DERA A.

33. On September 28th, the 10th Cavalry Brigade occupied DERA A without opposition, the enemy having set fire to the town and left during the night. DERA A was in a state of great confusion. Regular Sherifian forces in small numbers, and many irregulars and Bedouins were in the town and railway junction. Looting was rampant, and was only stopped by our troops piqueting the town.

The division now moved north, driving the remnants of the Turkish 4th Army before them.

KHAN DEMUM. September 30th, 12-00.

34. By 12-00 on September 30th, the advanced (11th Cavalry) Brigade of the division was approaching KHAN DEMUM, which they captured after some resistance by night-fall.

By this time, dusk on September 30th, the 5th Cavalry Division were astride, the DAMASCUS-KISWE road, and the Australian Mounted Division had closed the BEIRUT and DUMA Roads W. and N.-W. of DAMASCUS ; having moved *via* KUNEITRA and SASA.

All the moves had been timed to a nicety and the downfall of the Turk was complete.

The next day, October 1st, the Desert Mounted Corps occupied Damascus.

35. The following are some of the most notable lessons of these operations :—

- (a) The value of surprise, and success of the many preparations and safeguards undertaken to ensure secrecy.
- (b) The need of striking deep. The Turkish 7th and 8th Armies were avoided and the cavalry struck well to their rear.
- (c) The necessity for men and animals to start fresh. This was especially necessary for cavalry, with such distances in front of them and was ensured by the day's rest on September 18th.
- (d) The closest *liaison* with attacking infantry before and during the initial break through.

The Cavalry Divisional Commander was in personal touch with the Infantry Divisional Commander at TABSOR at 08-00 on September 19th.

- (e) Bad reconnaissance. 10th Cavalry Brigade lost their way at KERKUR and were followed by the rest of the division on the evening of September 19th.
- (f) Personal influence of Commander the tireless energy and prompt action of the Divisional Commander at KERKUR and KH. ARAH on September 19th averted what might otherwise have been a disaster, owing to delay and bad reconnaissance.

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- (g) The success of bold and rapid mounted action and of turning movements supported by frontal fire. This is a feature of the Palestine Campaign, and such cavalry attacks were successful, even against unbroken infantry in ten instances out of twelve. In all the actions quoted casualties were remarkably slight, owing to rapidity of movement and determination to close.
- (h) Great difficulty was experienced in feeding the large numbers of prisoners at BEISAN, and the equivalent of a whole regiment was away on escort duties.
- (i) The use of the sea is notable, *i.e.*, HAIFA and later, BEIRUT were used, as soon as possible, as supply bases to shorten the land communications, which were very poor.
- (j) The operations furnish a notable example of the parallel pursuit.

36. In Appendix "B" various administrative and other details of interest are shown.

APPENDIX A.

ACTION OF 2ND LANCERS AT AFULE.

September 20th 1918.

Reference rough sketch attached.

1. At 05-30 as the squadrons were moving down (B Squadron on right, C and armoured cars in centre, A on left, D and 2 machine guns in reserve) from LEJJUN a steady fire broke out from the direction of Point 193.

2. O. C. 2nd Lancers rode ahead of the reserve to find out what was happening, and on approaching Point 193 he received a verbal message from O. C. C Squadron (moving by LEJJUN-AFULE Road), that he was held up by a force estimated at 80 rifles.

He found the situation to be as follows :—

- (a) Turks holding a position in the open about $\frac{1}{2}$ mile east of Point 193.
- (b) C Squadron had dismounted 1 troop and their Hotchkiss Troop and were engaging the enemy with fire at about 800 yards range, while remainder of squadron was concentrating in rear with a view to moving round the enemy's flank.
- (c) The 11th L. A. M. Battery were in action about 300 yards in front of C Squadron, engaging the enemy with their machine guns.

3. From the high ground about Point 193 the enemy's position could be seen and was demarcated by the dust raised by his rifle and machine gun fire and it was evident that the estimate of 80 rifles was much too low.

4. The soil was black cotton, but not bad enough to prevent horses galloping. The enemy's flank could be distinguished, and no obstacle could be seen, so O. C., 2nd Lancers determined to turn the enemy's left and gallop the position.

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5. D Squadron (in reserve) was directed to move slowly for five minutes towards the left of the enemy's position (shown on the ground to the squadron leader), to allow time for machine guns to come into action, and then to turn the enemy's flank and charge.

The two machine guns were ordered into action near Point 193. The Adjutant was sent to gain touch with A Squadron, who at this time were on the road half-way between LEJJUN and KH-EL-KHUZNEB, with instructions to work round the enemy's right flank. The fight, however, was over before this order could be acted on.

6. By the time the 2 machine guns were in action, D Squadron had got well round the enemy's flank in column of troops. They then formed squadron and charged in extended order, rolling up the Turkish front line, capturing or killing every man.

The dismounted troop of C Squadron, on seeing this charge, was mounted by the troop leader and charged from the front with good results.

7. In the meantime, O.C. B Squadron (on the right flank), seeing what was happening, decided to co-operate. This decision was fortuitous, as the Turks were found to be holding the position in two lines, one immediately behind the other, and some 300 yards apart, and had D Squadron been alone, they might have suffered heavily from the fire of the 2nd line.

O. C. B Squadron realizing this, swung round outside D Squadron and charged the Turkish support line, rolling it up.

During the advance B Squadron ran into a wire fence and became considerably disorganized, while under heavy rifle and machine gun fire, but was rallied and reformed in time to co-operate with D Squadron.

8. The Turkish force was found to consist of a battalion with 3 machine guns. 40—50 were killed and some 470 taken prisoners. None escaped.

The 2nd Lancers lost 1 man wounded and 6 horses, which had to be destroyed.

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9. Comments.—

- (a) The O. C. 2nd Lancers decided to attack at once, without further reconnaissance, as he considered that the Turks were caught in the open, without any previous warning of his presence.
 - (b) The great value of surprise and mobility, and the moral effect of the lance are clearly exemplified by this action, as the Turkish battalion was a fresh one and had not been shaken by previous defeat. They fought well and kept up their fire until the 2nd Lancers got right into them, but the surprise, combined with frontal and flank attacks, was too much for them.
 - (c) The armoured cars were of great value in drawing the Turkish fire, and kept up their fire to the last moment.
 - (d) Both squadrons charged in line, and in one case the Hotchkiss Troop (B Squadron) formed in line with the rest of B Squadron and charged with it, to make numbers appear larger, as the squadron was reduced to 1 troop of lancers only.
 - (e) The route followed by B and D Squadrons afforded slight cover for part of the distance passed over in the approach manœuvring.
-

11

To Harla

Tal el
Muasini

ATA
ATA

EL LEJUN

From Musmos

To Janin

mile

APPENDIX B.

Administrative and other Details.

1.—Supplies. At 04-00 on September 19th.

For man.

For horse.

- | | | |
|------------|---|--|
| 1) On man. | 1 Iron ration. | |
| 2) On man. | Rations for 19th. | Rations for 19th (10½ lbs. grain in nosebag). |
| and horse. | Two days special Emergency (rolled in sand-bag on front of saddle in place of greatcoat). | 1 day special Emergency (10½ lbs. grain in 2nd nosebag). |

(3) On 1st Line Tpt. (L.G.S. Wagons.) 1 day special Emergency (10½ lbs. grain in sacks).

(4) In Div. Train. 1 day's mobile ration for Division.

(5) In Camel Con- Do. do.
voy.

but this could not keep up and was returned to Corps on evening 19th.

Notes—(a) Div. filled up with 1 day's grain at KERKUR (captured stores) evening 19th.

(b) Lorries delivered rations for 22nd to BEISAN on evening 21st, and daily from 22nd to 25th.

(c) Lorries delivered extra rations on evening 25th at BEISAN, to complete (2) to (4) above, for next move.

Lorries delivered rations for 27th, to Div. less 10th Cavalry Brigade at JISR MUJAMIE, on evening 26th.

(d) Lorries were then held up by a Wadi south of JISR MUJAMIE, till 07-00 on 29th, when a convoy got through and followed the division reaching DAMASCUS on October 3rd without losing a lorry across 140 miles of the most impossible country, half of it roadless and strewn with basalt rock.

(e) Division received rations on October 2nd by lorry at DAMASCUS, via KUNEITRA, for consumption on 3rd October.

(f) Tibbin (Bhoosa) had to be requisitioned from villages throughout.

2. Communications.—Turk air lines up to BEISAN and JISR MUJAMIE. After JISR MUJAMIE cable laid but found useless, as Arabs kept on cutting it. Wireless and occasional aeroplane messages. Motor D. R. (very slow) Mtd. men (within division only),

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In first four weeks the Desert Mtd. Corps used 1,520 miles of Turkish telegraph route involving 40,000 poles and 5,000 miles of wire.

3. *Distances covered by 4th Cavalry Division.*

	Miles.
08-00 September, 19th to 18-00 September 20th, north of JAFFA-BEISAN.	... 85
September 28th BEISAN-JISR MUJAMIE	... 14
" 27th JISR MUJAMIE-ERREMTE	... 38
" 28th ERREMTE-MEZERIB <i>via</i> DERA A	... 18
" 29th MEZERIB-DILLI	... 22
" 30th DILLI-ZERAKIYE	... 26
October 1st ZERAKIYE-DAMASCUS	... 22

4. *Prisoners taken by 4th Cavalry Division.*

(a) September 19th—September 25th	... 19,000
(b) September 28th—October 1st	... 700

The Division arrived at DERA A too late to cut off the Turkish 4th Army, but drove them into the arms of the 5th Cavalry Division and Australian Mtd. Div. at DAMASCUS.

The rationing and despatch to the rear of (a) was a great difficulty and at one time a whole regiment was absent on escort duties.

5. *Water supply.*—Frequently necessitated longer marches, and regulated halting places, but on the whole presented no insuperable difficulties.

6. *Medical.*—Hospital formed at JISR MUJAMIE from Immobile, *i. e.*, dismounted and slow moving portion of Field Ambulances, till division reached DAMASCUS. Petrol shortage necessitated leaving motors behind for 2 days at DAMASCUS.

Hospital arrangements in DAMASCUS totally inadequate. Outbreak of malaria and influenza on October 3rd (due to mosquitoes and unhealthiness of BEISAN). 3,600 sick and 400 of these deaths in the division (of a total of some 7,000).

7. *Losses in animals.*—September 19th—20th—26.

September 21st—October 6th 500 (approx.) and 300 sick remaining with division (of a total of 8,500 approx.).

Metal
Semi-
Unme
Railwa
Rly. &
Wadi
River.

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8. *Losses in Transport.*—September 19th—October 31st—6 Ford cars, 2 Ford ambulances, 7 motor cycles, 7 G. S. wagons, 5 L.G.S. wagons, 9 fore-half L. G. S. wagons, 19 rear-half L. G. S. wagons, 1 horse ambulance, 1 Maltese cart, 1 Mess cart.

9. *Equipment, etc., carried.*—Greatcoats were left behind. Horses carried 2 blankets under the saddle. In spite of the extra weight and heat this was universally approved by regiments and was very successful in saving galls.

10. *Lorry performances.*—In the first 3 weeks the supply column lorries of the Corps covered 720,000 miles, averaging 70 miles per lorry per day, lorries being on the move 11 hours daily.

INDICATION OF TARGETS TO ARTILLERY.

By Major H. J. G. Gale, R. A.

There seems to be in the minds of many officers a doubt whether the system laid down in I. A. O. 271 of 1922 for the indication of targets, and fall of rounds by other arms to artillery is the best and simplest.

In these days of progress it is perhaps permissible for one who has both experimented in, and conducted a course in the above system to suggest that it might be improved.

Let us review the present system.

The observer, who it must be borne in mind may be the most junior N. C. O's, is required to :—

First, place himself in the centre of the clock, the battery at six o'clock, and accurately select some object in the foreground at twelve o'clock.

Having done this, he places the target on the clock with reference to this imaginary line, estimates the distance from himself to the target, and the height in feet the target is above or below him.

Given sufficient training, this no doubt is within the powers of the average N. C. O., British or Indian.

Now, however, the scene changes. Having done the above the observer has to *change his clock*. So has the battery, and this latter in accordance with the ORIGINAL INDICATION sent by the observer. Should the latter have made a mistake of even half-an-hour in the case of a target between ten and two o'clock, or of 100 to 200 yards in his estimate of distance in the case of targets between ten and eight and two and four o'clock, not only will the first round be far out for line, but the *position of the target* will have been wrongly plotted in the battery.

This will make it difficult for the observer to get the guns back to the target by the clock method.

Let us take an example in order to make this clearer.

The observer indicates a target to the battery as "Sangar Ten-half 500." Whereas it should have been "Eleven-half 500."

As a result the first round falls to the left and the officer in the battery has placed his target an hour wrong on the clock. Assume this round to have fallen at seven 300".

Now owing to the original mistake, the battery clock is set with seven o'clock right of the line battery-target. The officer in the battery therefore on receipt of the above observation gives so much more left deflection, thus throwing the next round further to the left, and annoying the observer intensely. A few minutes with a watch, pencil and paper will make this anomaly clear to the reader.

In order to avoid this anomaly, in fact in order to eradicate any after-effects of an initial error in the indication of the position of the target, it would seem better to revert to the system laid down in I. A. O. 868 of 1921.

In this system the position of the target only is indicated by the clock code, the fall of rounds being indicated as so much plus, minus, right or left of the actual target.

In addition to the argument in its favour given above, this system has the advantage of being far simpler, an important factor when, as already mentioned, the observer may be a junior N. C. O.

Finally, it commends itself to the majority of officers of the other arms, with whom the writer has come in contact.

Before concluding, the writer would like to bring to notice another point in connection with the indication of targets by other arms.

If, as is often likely to occur in hilly country, the observer makes an error in his estimate of the height up or down to the target, how should he indicate the fact to the battery ?

The following method was tried and gave satisfactory results.

The first round of the series fell at the foot of a hill on top of which was the target.

The observer, rightly judging that this was mainly due to a wrong estimate on his part, of the height of the target above him, sent to the battery "Four 100—Down 200."

The angle of sight was raised in the battery in addition to a slight alteration being made to the range, with the result that the next round hit the target.

This of course was only an experiment, and is no doubt open to criticism. The fact remains, however, that some system for dealing with this problem should be laid down.

Another point which requires to be settled is, what orders should the observer be allowed to give ?

It is obvious that he must give some, such as "Change Target " " Fire for Effect," etc.

It is suggested that some of the ten-pounder ammunition lying in arsenals might with advantage be used to experiment with and settle these points; officers and N. C. Os. of other arms being used as observers, thereby obtaining very necessary practice. There is no doubt that the result would be in the interests of " All concerned."

OPERATIONS IN BRITISH SOMALILAND 1920.

LECTURE GIVEN AT THE STAFF COLLEGE, QUETTA, IN 1922,

By Major C.A.L. Howard,

13th Bombay Lancers.

Introductory.

1. The operations I propose to deal with, though carried out on small scale, are of considerable importance as an illustration of the employment of aircraft against a savage enemy. In fact this campaign was initiated more or less as a test case, and the result was proclaimed and is still quoted, as you heard a few days ago, as a sweeping victory for the aeroplane. The Air Ministry, indeed, went so far as to declare that savage warfare was at an end.

You can judge for yourselves to what an extent these claims are borne out by events.

The operations were divided into two distinct phases:—

- (a) Independent air operations.
- (b) Combined air and ground operations.

It is therefore possible to estimate the relative values of these two methods of dealing with the same problem.

There is a notable example of an all-out pursuit by a mounted force, pushed to the limit, *i. e.*, nothing left to pursue and nothing left to pursue it with.

2. I propose to deal with my subject under four main headings:—

Headings.—

- (a) Preliminary discussions and plan of campaign.
- (b) Preparation and early stages.
- (c) Short narrative of events.
- (d) Conclusion.

Operations sanctioned.

3. *Preliminary discussions and plan of Campaign.*

Offensive operations were sanctioned in September 1919. The Air Ministry was consulted, and from the first was keenly interested

They insisted, however, that operations should be undertaken by the R.A.F. on a purely independent basis, without the co-operation of ground troops; and it was only after lengthy discussion that a compromise was arrived at on the following basis:—

Air Ministry Plan.—

“An independent air force, self-contained in all respects, under an officer of the Royal Air Force, taking orders direct from the Air Ministry, was to attack the Mullah, his followers and his stock, and to disperse them. In the event of these independent operations proving successful, the rounding up of the Dervishes would be undertaken by the ground troops, when independent operations would cease and the Air Force would co-operate with the military forces of the Protectorate, the general direction of affairs being vested in the Governor.” I may here mention that the Governor was a civilian *Opposed by military authorities.*

The first part of this plan was strongly opposed by the Protectorate, military authorities; and in endeavouring to make their attitude clear, I must refer briefly to past events. As you will remember from Major Ismay's lecture,* it had been the practice of the Mullah in previous expeditions to establish himself behind a waterless belt, after defeat or—as happened in 1908—on the mere threat of an advance. There he would remain until he had persuaded us that his power was broken, or that he had reformed.

Mullah's line of retreat.

At such times it was customary to refer to him as a “discredited refugee” or alternatively to announce one of his periodical deaths. No sooner had the expeditionary force been withdrawn than back he would come; our friendly tribes would be raided and terrorized without our being able to raise a finger, and his prestige would be established higher and firmer than ever.

That he intended to escape S.-W. to the WEBI SHEBELI, in the event of attack at that time, was well known to us. Major Ismay further made it clear that the whole Dervish movement was inspired by this one man, and stood or fell by him. His

* Published in U. S. I. of India Journal for January, 1923.

capture or death was perhaps too much to hope for; but the destruction of his power and prestige was paramount if finality was to be obtained.

Objective.

In this connection I will quote an extract from the official history of the 1904 operations by Major-General afterwards Field Marshal Sir Charles Egerton, which reads as follows :—
“To actually capture a man whose range of movements extends from Cape GARDAFUI to the equator and from the sea to the Abyssinian border, was almost a hopeless task, and could only be attained by an extraordinary piece of good fortune; but the Haroun, which was his emblem of power and seat of government offered a fairly large though moveable objective. Though the Mullah himself might escape, the capture of the Haroun meant the destruction of his prestige and, in all probability, his own final surrender.”

It was felt that aeroplanes acting independently could not achieve this objective, and would tend to prejudice the success of the campaign, by alarming the Dervishes and thus allowing them time to escape before the ground troops could arrive on the scene; and years of experience had made it abundantly clear, that once the Dervish had gained a clear start, his great mobility rendered him practically immune from pursuit.

From the military point of view, the only hope of success had always appeared to lie in the concentration of an adequate mounted force within striking distance of the Mullah's Haroun.

Military views.

The military authorities, therefore, advocated a combined operation against the Mullah's Haroun, with the Camel Corps standing by close up.

The Air Ministry would not, however, agree to any modification of the original arrangement.

Before passing to the detailed plan of campaign, I shall first touch briefly on the general situation before the commencement of operations.

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General situation before operations.

(a) Distribution of the Protectorate Forces.

H. Q.....BURAO.

Somaliland Camel Corps.

H. Q. and 3 Camel Coys.....BURAO.

1 Pony Coy.....BER.

Temporary Garrison.

1 Coy. Indian Infantry.....BURAO FORT.

1 Coy. Indian Infantry.....LASDUREH FORT.

1 Coy. Indian Infantry.....LAS KHORAI.

Protectorate forces.

Our outpost line, held by illaloes—total strength 300—is shewn on the map.

There was also a Military Police Force of 700 rifles, well armed and equipped, under military officers and ex-officers.

Communications.—

(b) Communications.

There were wireless installations at all military stations except BER, and wireless communication between BERBERA and ADEN. Road communication was bad everywhere and not passable for wheeled transport, though Ford cars were used on the old expeditionary roads between BERBERA, BURAO and the AIN, and between BERBERA and LASDUREH.

The Mullah's Haroun.

The Mullah's Haroun was at TALE where he had constructed a strong system of forts. Shortly after the present operations had been decided on, news was brought in that he had moved from TALE to a new position at MEDISHE, about 10 miles S.-W. of JIDALI, as a result of the growing pressure from the Mijertein, a powerful Eastern tribe under Italian protection. This move was most satisfactory from our point of view, as it considerably lengthened his line of escape.

There was also a strong fort at JIDALI, which was the usual jumping-off place for raids in the N.-E.

Dervish Forts.

There was another strong fort at BARAN watching the Warsangeli and for operations against the Mijertein.

There were minor forts in the SURUD Hills, and along his lines of communication to ABYSSINIA. The smaller forts usually held garrisons of from ten to twenty men. The larger ones had no fixed garrisons and were principally used as concentration and rallying points for raiding parties.

The Mullah's strength at this time was at a very low ebb.

Strength of Dervish fightingmen.

He still had round him many of his old and trusted followers and the general standard of his fightingmen was as high as ever. The past six years had, however, seen a constant wastage due to various causes, which I do not propose to enter into here, and his total strength was therefore reckoned at not more than 2,000 riflemen and 5,000 spearmen, of which, owing to commitments elsewhere, he could not concentrate more than half against us.

Ammunition.

Another source of weakness was lack of ammunition, the supply of which had been considerably curtailed during the War.

Detailed plan of campaign proposed by military authorities.

The plan submitted by the local military authorities, was as follows :—

- (a) A force designated as "A" Force, strength S. C. C., Wing Indian Infantry, supply column with 2 months' supplies, to advance previous to zero day, *i. e.*, day fixed for first aerial bombardment, to EL AFWEINA, and halt there for two days to prepare an advanced base with ration dumps and landing grounds for aeroplanes.

The force, less 1 Coy. Indian Infantry, with 3 days' rations, was then to occupy DURDUR DULBEIT the night previous to zero day.

- (b) A second force designated "B" Force, strength 1 battalion, to move from LASKHORAI the day previous to zero day, and to attack and occupy BARAN on zero

day or the day following. The services of a K. A. Rifle battalion from E. Africa, and an increase in the establishment of the Camel Corps were asked for.

- (c) A Tribal levy of 1,500 rifles under a British officer, to be raised from the friendly tribes, to operate in the NOGAL Valley across the Dervish line of retreat. Its rôle was to round up Dervish stock, and to cut off any small parties which might escape the troops.

Approval of R. A. F. Commander.

The R. A. F. Commander on the spot approved this plan.

Modification by Air Ministry.

The Air Ministry, however, whilst agreeing to the movement of "B" Force, stipulated that "A" Force must not advance from ELDURELAN until 48 hours previous to zero day.

Objections by military authorities.

It was pointed out that under this restriction the mounted portion of "A" Force could not be beyond ELAFWEINA.—70 miles from its objective—on zero day, with 3 days' rations in hand, the dismounted portion with the supply column being two days in rear. The mobility of the mounted troops would thus be almost entirely discounted, and—a very important point—they would be compelled to operate in unknown country without previous reconnaissance.

Adoption of modified plan.

The Air Ministry would not, however, go back on their decision, and, as they were finding the funds for the expedition, there was no alternative but to adopt their plan.

BERBERA was decided on as the base of operations for the independent air attack, and advanced bases were to be constructed at ELDURELAN and ELDAB; the former for the attack of the Dervishes in the JIDALI District, and the latter for operations in the NOGAL Valley in case the Dervishes broke south.

Strength of R. A. F.

The force allotted was as follows :—

32 Officers.

164 O. R.

One flight aeroplanes (D. H.-9) and six spare machines.

The plan of campaign being now fixed, the preparatory stage was entered upon.

Importance of surprise.

Surprise was vital to the success of the operations, and secrecy and rapidity were, therefore, the main essentials.

The Somalis had, however, seen many expeditions, and the manifold signs of activity told their own tale in due course.¹

From about mid-December onwards was, therefore, an anxious time.

Steps taken to ensure secrecy.

It was, above all, most important that news of the aeroplanes should not leak through to the Haroun, and their arrival was therefore delayed till the last possible moment.

In the same way it was necessary to postpone the enlistment of the tribal levy until the last possible moment.

Transport.

The outstanding problem in this, as in all previous expeditions was that of transport.

It was reckoned that 5,000 camels would be required for the whole force. This does not seem a very startling figure in a community which eats, drinks and breathes camel, but in view of the fact that resources had been drained to find transport for the Egyptian Expeditionary Force considerable difficulty was anticipated. Very favourable terms, including a good rate of pay, rations and insurance against loss, were offered and proved very popular. The task of selecting and branding suitable animals and enrolling drivers, (one to three animals), was allotted to the various district commissioners, and 42 companies each 120 strong were eventually forthcoming. Each company was placed in charge of a reliable Somali, generally a Government or ex-Government servant. When it is considered that the total S. and T. Staff throughout the operations never exceeded 5 British officers and 1 Warrant Officer, and that the drivers were "jangli" tribesmen, the success of the S. and T. arrangements is no mean achievement.

Increase in strength of S. C. C.

The increase in strength of the Somaliland Camel Corps was effected by drafting in the required numbers from the Police, and putting them through a rapid course of training in mounted work. The eventual strength worked out as follows:—

1 Indian Camel Coy. 150 rifles. 4 Vickers guns. 2 Stokes.

2 Somali Camel Coys. (each) 150 rifles, 2 Vickers guns.

1 Somali Pony Coy. 160 rifles. 4 Lewis guns.

1 Somali Pony Coy. 120 rifles.

Depot. 83 rifles.

Total 813 rifles, 8 Vickers guns, 4 Lewis guns. 2 Stokes mortars.

Remounts.

Remounts were, of course, required in proportion to the increased strength, and every endeavour was made to obtain riding camels from ADEN and the SUDAN. Ponies were purchased locally. We were, however, unable to complete our requirements in camels and it was eventually found necessary to dismount about 100 J.R. and F. who were formed into a composite infantry company. This company proved very useful as escort to transport, etc., and came into action on several occasions. The actual mounted strength of the corps, therefore, to take the field was about 630 rifles.

Ammunitions and stores, etc.

Additional ammunition, saddlery, water tanks and a large supply of animal rations had to be ordered.

Work on roads.

The roads between BERBERA and LASDUREH, and BERBERA and BURAO were improved, and work was commenced on aerodromes at LASDUREH, LASKHORAI and BURAO.

Ration dumps.

Ration dumps were built at LASDUREH, where it was proposed to collect 3 months' supplies and reserve ammunition for "A" Force, and work was started straight away on the establishment of this dump, by means of hired transport.

Base at LASKHORAI.

It was decided to move the K. A. R. to MUSHAHALED on arrival, with their base at LASKHORAI, where a temporary pier

was constructed. Supplies were forwarded here by sea and were to be moved up to MUSHAHLED by camels from the new Transport Corps which had been allotted to "B" Force, and shipped to LASKHORAI.

Arrival of K. A. Rifles.

The first contingent of the K. A. Rifles disembarked at LASKHORAI on the 8th November, and the remainder on the 2nd January. The whole battalion with 2 Stokes mortars, 4 Vickers guns, 14 Lewis guns, tent and bearer section, portable wireless set, transport and supplies for two months, and reserve ammunition, was concentrated at MUSHAHLED by the 17th January.

In accordance with the plan of campaign, this force was to move 24 hours before zero day, which was to be notified later.

Occupation of ELDURELAN.

On the 18th December ELDURELAN was occupied by a company of the 101 Grenadiers and work was commenced on the construction of an aerodrome, ration plinths, and the movement of supplies from LASDUREH to ELDURELAN. The remainder of the wing 101 Grenadiers from BURAO reached ELDURELAN on the 2nd January. The Somaliland Camel Corps, less one pony company, detached to BERBERA as escort to the R. A. F. personnel, reached ELDURELAN on the 9th January.

Arrival of "Z" Squadron, R. A. F.

On the 30th December H. M. S. "Ark Royal" with personnel and machines "Z" Squadron R.A.F. arrived at BERBERA. Stores were quickly moved up to ELDURELAN, and the personnel on ponies, under escort of the pony company Camel Corps, reached there on the 16th January, a distance of over 100 miles.

Formation of Tribal Levy.

The R. A. F. now having arrived in the country and commenced work on their machines, there was no longer any necessity for delaying the formation of the Tribal Levy. Consequently H. E. the Governor summoned a meeting of the tribal leaders at BURAO on the 1st January and announced his intentions. The required numbers were readily forthcoming, and the concentration

took place at AINABO on the 15th January. After constructing an aerodrome here the Levy moved forward to the YAGHORI-GERROWEI line, and pushed out a force of 500 rifles to GAOLO to watch TALE.

Concentration at ELDURELAN.

The position was now as follows :—

"Z" Squadron R. A. F. and "A" Force were concentrated at ELDURELAN and everything was in readiness for the advance.

"B" Force was ready to move from MUSHAHLED.

The Tribal Levy was in its appointed place.

Zero day.

Preparations were now complete, and it remained only to fix the date for "zero" day.

The 21st January was eventually decided on.

Short Narrative of Events. S. C. C. moves out of ELDURELAN.

The Camel Corps moved out of ELDURELAN at midnight on the 18th-19th, i.e., 48 hours before Zero, with orders to occupy ELAFWEINA on the 21st. A light transport column with five days rations for the Camel Corps, and portable wireless, under escort of 200 Illaloes was organized to follow the mounted troops as rapidly as possible in case it was found necessary to act before the main transport column could come up.

Transport Column.

The main transport column carrying two months' supplies moved at dawn on the 19th, and reached ELAFWEINA on the 22nd January, a distance of 65 miles, for the most part over rocky and broken country, intersected by nullahs. The column consisted of 3,500 camels, divided into six sections, and moving in single file, under escort of the wing 101 Grenadiers (less 2 platoons) and the dismounted Coy., Camel Corps.

Arrival of aeroplanes at ELDURELAN.

On the 19th seven machines arrived at ELDURELAN from BERBERA and another on the 20th with the O. C., R. A. F.

Commencement of independent air operations Attacks. on MEDISHE and JIDALI.

On the 21st six machines left ELDURELAN to attack MEDISHE but owing to the presence of clouds and the difficulty of locating points in uncharted country, only one machine found the objective. Casualties were inflicted, including the Mullah's uncle Amer Hassan (not the AMIR) and the Mullah himself is said to have had a narrow escape. Four machines attacked the Dervish fort and stock at JIDALI, and one machine landed at LASHORAI with engine trouble. On the 22nd and 23rd aerial attacks were maintained morning and afternoon, with great moral, but little material effect, as the Dervishes had, by this time learned to take cover on the approach of the machines.

Commencement of combined operations.

As an aerial reconnaissance over MEDISHE and JIDALI area on the 24th failed to disclose any signs of the enemy, and, as the aeroplanes acting undependantly could therefore achieve nothing further, orders were given for combined operations to commence.

The net results of the four days independent operations may therefore be summarized as follows:—

- | | |
|----------------------------|-------------|
| (1) Material effect — | Negligible. |
| (2) Moral effect— | Great. |
| (3) Touch with enemy lost. | |

"A" Force reaches ELAFWEINA.

In the meantime the mounted troops of "A" Force, with the H. Q. Field Force, had reached ELAFWEINA on the morning of the 21st, and established a defensive post and aerodrome. Illaloes were pushed out towards GUDANOD and DURDUR DULBEID, Camel Corps stood by ready to move at short notice.

Arrival of Supply Column.

The supply column arrived on the afternoon of the 22nd, and, on the afternoon of the 23rd the Camel Corps moved to GUDANOD and was at ELDER on the 25th.

Touch with the enemy lost.

As touch with the Mullah had not, up to this time, been re-established, the O. C., Field Force decided to push on to JIDALI

where he arrived with the mounted troops on the 27th. By previous arrangement with the O. C. "Z" Force JIDALI was bombed and shot up till 10-00 but without result.

Attack on JIDALI by S. C. C.

At 11-00 the Camel Corps was ordered to attack dismounted, as patrols had reported the fort still occupied. Stokes mortars were brought up and direct hits obtained, some of which went through the roof and burst in the interior. The enemy, however, held out till dark, but evacuated during the night.

Attack on BARAN.

In the meantime "B" Force which had moved out from MUSHAHLED on the early morning of the 20th, had attacked BARAN on the 22nd. Stokes mortars were employed here also and although direct hits were obtained, they had very little effect as the forts were strongly roofed. It was eventually found necessary to breach the walls with gun-cotton before an entrance was made on the morning of the 24th.

Capture of BARAN Fort.

"B" Force was now ordered to remain at BARAN until further orders and to keep a sharp look-out for any Dervish move eastwards.

MEDISHE still occupied.

Illalo patrols sent out to MEDISHE returned to JIDALI on the 28th, with information that the forts were still held, but that the Haroun had been evacuated. It therefore seemed probable that the Mullah and his immediate following had retired into the SURUD Hills, but, as no deserters or prisoners had been brought in, the situation was, at this time, very obscure. Illalo patrols were posted on the MEGEDU, GARABGHARI, and ELDER Line, to watch for any movement south wards. Air reconnaissances were made daily over the SURUD area, and as far as LASKHORAI and TALE, but no trace of the enemy could be found.

News of Mullah's flight.

On the 30th as MEDISHE was still occupied, an attacking column was organized in the hope that information might be obtained through prisoners. On the same evening, however, a

leading Dervish came into JIDALI, with the information that the Mullah on hearing of the presence of troops had escaped, and was heading south for the WEBI SHEBELI *via* LASANOD, and GALADI with the Haroun. He himself had left the party at JITASALE the previous day at 15-30.

Camel Corps in pursuit.

The attack on MEDISHE was immediately countermanded and the Camel Corps was ordered out in pursuit.

Leaving JIDALI at 18-00, and marching throughout the night, we reached ELDER at 09-00 on the 31st. Tracks were crossed near JITASALE, but it was decided to push on parallel to, and west of their line of retreat, in the most direct line for the NOGAL with the intention of getting ahead and cutting in. Near ELDER we came on the Dervish stock, scattered over miles of country in charge of parties of the enemy. A few shots were exchanged but nothing further was done, as it was obvious that any action would interfere with our pursuit. This is a notable example of a mounted force on a special mission declining to be seduced from its premier rôle. As Major Ismay told you, the Somali is, first of all, a cattle-thief, and the abandonment of vast quantities of stock was almost more than our men could bear.

Information from aeroplane.

Here an aeroplane dropped a message to the effect that a party of Dervish horsemen had been located and bombed near DARINGAHIYE. This point is on the edge of the waterless SORL HAUD which is impassable for a comparatively large force; and as it was now evident that the chase would be a long one, it was decided to adhere to the original line of pursuit. S.C.C. reaches ELAFWEINA.

We reached ELAFWEINA at 01-00 on the 1st February, having covered 70 miles in 30 hours. Early the same morning we watered our animals and refilled with rations. Arrangements were made with the R. A. F. to reconnoitre the SORL, which appeared to be the most likely line of flight.

Air reconnaissance.

We moved out again that afternoon in the direction of BERWAISO, and on the way an aeroplane message was dropped to the effect that a Dervish had come into ELAFWEINA, and reported the Mullah as moving on TALE across the SORL. The Camel Corps was thereupon ordered to push on to HUDIN, where it would be in a position to cover a Dervish retreat across the NOGAL. A light transport column, with 10 days rations, was organized to follow up and eventually reached HUDIN on the 4th February.

Communication between H.Q. Field Force, now ELAFWEINA, and the various components of the force, was entirely by aeroplane, all the portable wireless sets having broken down.

TALE bombed.

TALE was bombed on the 1st February and appeared to be well garrisoned.

S. C. C. reaches HUDIN.

The Camel Corps reached HUDIN at 18-00 on the 2nd February, having covered 150 miles in 72 hours, without grazing the animals. On the same day the O., C., Levies was informed of the situation by aeroplane, and warned to keep a sharp look-out.

TALE photographed from the air.

On the 4th TALE was again bombed, and photographs taken, from which it was evident that the fortifications were of great strength. In view of this disclosure it appeared to be well on the cards that the Mullah might elect to make a stand at TALE and a plan was drawn up to meet such an eventuality.

Plan to attack TALE.

It is notable that on this occasion, the basis of the plan was close co-operation between the R. A. F. and the ground troops.

In the meantime the Camel Corps awaited further information at HUDIN.

S. C. C. moves to KURTIMO.

On the 4th a Dervish was captured, who stated that the Mullah's following had split up in the SORL and was making for the NOGAL in small parties. It was thereupon decided to move to a central position at KURTIMO, where we arrived at 18-00 on the 5th.

Mullah reported in TALE.

Here we met the O. C., Levies, who stated he had reliable information that the Mullah had entered TALE on the 3rd. It was, therefore, decided to converge on TALE.

S. C. C. and Levies converge on TALE.

The Levies accordingly moved out next morning, and the Camel Corps followed the same evening with strong patrols wide on each flank. I may here mention that we were much opposed to the Levies abandoning their line, but the O. C., Levies, at that time took orders direct from the Governor and was not under military control.

At TAGABEI, which we reached early on the 8th, it was learned that the Mullah's presence in TALE was by no means certain, though he was thought to be somewhere in the vicinity. 200 Levies were therefore pushed up to watch TALE. The Camel Corps and the remainder of the Levies moved on to GAOLO the same afternoon. The ponies were by this time showing signs of wear, chiefly owing to lack of grazing, and this march was done on foot.

ABDURREHMAN JAHID—Mullah's second son surrenders.

Mullah's presence in TALE corroborated.

Early on the morning of the 9th ABDURREHMAN JAHID the Mullah's second son, came into GAOLO and confirmed the report that his father was actually in TALE but that he was preparing for flight to the WEBI SHEBELI.

The Levies were therefore pushed up to surround TALE, and the Camel Corps followed the same afternoon.

On the way a message was received from the O. C., Levies, that, on seeing the dust of the Camel Corps, the Dervishes had made a determined sortie under cover of which a party of horse-men had made off to the north.

As the Levies totalled about 1,000 men with a plentiful supply of ammunition and the Dervishes at no time numbered more than 200 this is a fair sample of the moral ascendancy held by the Dervish.

Mullah's escape from TALE.

A later message stated that a Turk had been captured and reported that the Mullah had escaped and was making for the WEBI via GEDERMORELLI. Having sent out patrols to find the tracks we bivouacked near the defences. At 01-00 these patrols reported that owing to the hard surface (gypsum) they were unable to distinguish tracks by moonlight. There was therefore nothing for it but to wait for dawn.

S. C. C. moves out in pursuit.

Moving out at 05-30 the Camel Corps took up the final pursuit, and was soon on the enemys tracks, which first led north as if towards the SORL, but eventually bore away east and finally S.-E. Visibility was bad owing to mirage, and ostriches and wild asses were frequently mistaken for horsemen and pursued accordingly. The pursuit was continued till darkness covered the tracks and resumed next morning at 03-00 when the moon rose. The tracks now broke up completely, and it was necessary to send forward patrols to investigate. After some delay they were again found to converge at a well near GALNOLI. From this point all but the fittest animals were sent back to GAOLO, and the pursuit was continued with 150 rifles, 3 M. Gs. and 2 Stokes mortars. Tracks now swung away S.-W.

Surprise of Dervish party.

At about 15-45 a patrol surprised a Dervish piquet, who reported the enemy at BIHEN Nullah, about a mile ahead. The party was surprised and annihilated. Most of the Mullah's wives, children and some of his near relatives were captured, but there was no sign of the Mullah himself, nor could the captives give us any information. We camped that night at BIHEN. Next morning a patrol reported a party of horse and foot advancing on GERROWEI. The Camel Corps immediately saddled up and gave chase, coming up with the enemy near GERROWEI

Stream. The footmen took up a position and looked like putting up a fight, but the ponymen of the Camel Corps, about a troop strong, galloped straight over the top of them, and eventually rounded up all the horsemen in rear.

Second party accounted for.

ENA OW YUSUF, the Mullah's favourite wife, was captured but could give no information of her husband's whereabouts.

An extensive drive was therefore organized, and tracks of ponies and camels were discovered leading towards the HAUD. These were followed by a camel troop and the few remaining ponies which were able to move out of a walk, and a party of Dervishes on foot was overtaken about 15-30, and killed or captured. Prisoners, however, knew nothing of the Mullah's movements.

Third party encountered.

We rallied at GERROWEI reaching BIHEN after dark, utterly worn out.

S. C. C. returns to GAOLO on foot.

Moving on foot and practically without food, we started back next morning, reaching BIYMADDU on the 13th and GAOLO on the 15th.

Men and animals were completely exhausted and suffered much, especially the British and Indian ranks—from vomiting and extreme diarrhoea caused by foul water.

The party, however, came in well, and I can remember the Somali ranks asking permission to dance into camp!

Aeroplanes took no part in this final pursuit which was beyond their range.

This ended the active operations.

All the Dervish stock fell into the hands of the Levies as anticipated. The greater part of the Mullah's family were in our hands, his leaders with few exceptions had been killed or captured, all his rifles were in our hands, and his forts had been destroyed.

He had therefore lost everything, but he himself was still at large.

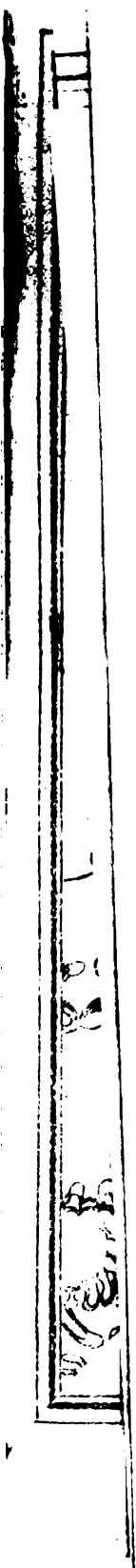
Conclusion.

In conclusion I submit that the independent air operations stage was a great mistake, and seriously prejudiced the success of the operations as a whole.

The first attack on MEDISHE had a great moral effect, but the aeroplanes acting independently were unable to exploit their own success. In fact it was only by good luck and the determined efforts of the Camel Corps that the situation was retrieved. The Dervishes were given time to recover from their first fright, and that they quickly realized the limitations of attack from the air, is evident from the fact that they were content to lie up in caves, until the arrival of ground troops urged the Mullah to make his escape. Furthermore, forts withstood attack from the air and were in no case damaged or evacuated as a result of aerial bombardment. This fact is in itself proof of failure.

The fact that after the first bombardment touch was lost with the Mullah and his immediate following is a further illustration of the limitations of independent air-attack. The Air Ministry laid great stress on the dispersion of the Dervish forces. This is hardly a just claim as, owing to the Mullah's many commitments, dispersion was already an accomplished fact. In any case dispersion was not, and never had been, our objective. On the contrary, our outstanding difficulty had always been to devise some means of concentrating the Dervishes in order to deal them a decisive blow; the history of Somaliland records one long continuous struggle against this self-same dispersion.

Used in conjunction with ground troops aeroplanes were invaluable in many ways, especially in maintaining *liaison*; but in their independent rôle they could not and did not obtain important results.



THE EVOLUTION OF RECOIL

By Col. C. J. D. Freeth.

Until some 36 years ago a field gun carriage consisted simply of a wheeled support for the gun and the only means of limiting the recoil was the resistance to motion of the gun and carriage.

By the introduction of cordite, in 1888, it became possible to improve the ballistics of the gun without exceeding the permissible limits of pressure in the bore.

The increased power of the gun thus obtained naturally resulted in greater recoil, and it became necessary to introduce some system of brake to the carriage in order to reduce the labour of running up. The earliest means of checking recoil were either nave, tyre or drag-shoe brakes. It will be noticed that they all reduce the recoil by means of *mechanical friction*.

Apart from the fact that they were none of them very efficient, the employment of friction has two main objections *viz* :—

- (1) The energy of recoil is entirely wasted and cannot be employed to restore the gun to its original position.
- (2) The result of this frictional resistance is that wear must take place in the parts of the carriage which produce the friction; and frequent renewal of the parts affected is therefore rendered necessary.

We then come to the introduction of the spring spade, which was designed with a view to getting rid of the above objections by absorbing the energy of recoil in compressing the spring, and using this absorbed energy to bring the gun back to its original position.

There were three systems of spring spades. In the first system the spade is placed under the trail. It was either on a hinge or slide. In both cases the recoil extended a spring which subsequently recovered and ran the carriage up. In the second system the spade is hinged under the axle tree; but otherwise its action is similar to that of the trail spade.

The Evolution of Recoil.

In the third system the spade is on the drag-shoe, in the form of projecting spurs. The drag-shoe is attached to a rope which passes round a drum to a spring placed in the trail.

These spades were in some cases combined with a hydraulic buffer which allowed the gun a short recoil on the carriage. These short-recoil buffers were, however, designed with the object of lessening the maximum strain on the carriage, not of reducing the length of recoil.

A new phase in field gun carriages was started about the time of the South African War, when the celebrated French 75 m. m. field gun, which was kept secret for so long, was introduced. This gun had a long recoil, the carriage itself being stationary.

The advantages of this system are enormous. Of course the rate of fire is greatly increased; but there are also other advantages which although equally important, are not equally obvious.

In the first place we have the reduction of fatigue to the detachment, who are saved the labour of running the gun up after each round. This is a matter of great consideration in a lengthy day's firing. But there is also the question of visibility. As we have all learnt during the Great War, invisibility is all-important, and invisibility depends to an very large extent on the absence of motion. One seldom locates a bird or a wild animal till it moves, even though one can hear it. A soldier lying on the ground with his rifle cannot generally be detected at any distance till he moves his arm to actuate the bolt.*

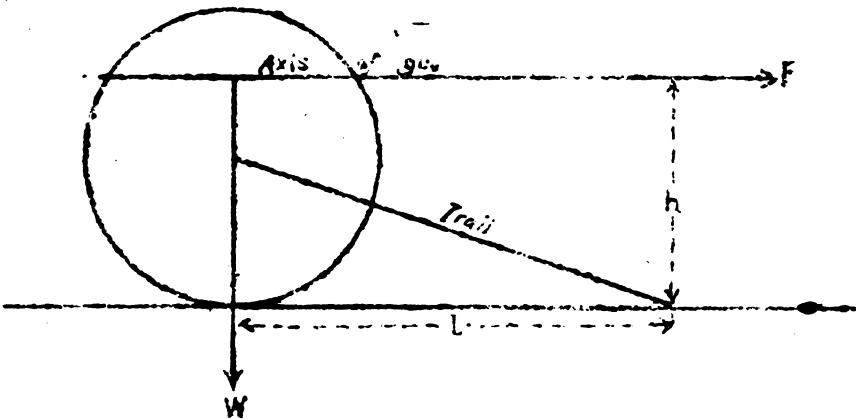
So with the field gun, even though the flash may be apparent, it is momentary, and is not easy to lay on, whereas the gun carriage being run up into its original position can usually be easily picked up and laid on.

I will not dilate here on the difficulty in ammunition supply which arose owing to the more rapid service of the gun, as this is outside the province of this article; but will at once proceed to a study of the means by which the non-recoiling carriage has become possible.

*This is a strong argument in favour of an automatic rifle.

As the carriage itself remains stationary, some means must be employed to absorb the shock of discharge or the strains on the carriage would become prohibitive and the carriage would turn over.

The condition are shewn diagrammatically in the following figure:—



We have two moments acting about the point of the trail. F which represent the Force of Recoil, multiplied by h tends to turn the gun over. The other moments is represented by W , the weight supported by the wheels, multiplied by the distance l . This moment tends, of course, to prevent the gun turning over and must be greater than Fh .

If the gun is inclined to turn over we must either :—

- (1) Increase the weight of the carriage.
- (2) Reduce the height of the gun from the ground.
- (3) Increase the length of the trail.
- (4) Reduce the force of recoil.

Let us examine these in detail. It is obviously undesirable to increase the weight of the carriage. A field gun should be as light as possible.

The height of the gun from the ground is chiefly governed by the diameter of the wheels, and we cannot go beyond the minimum necessary for travelling.

The Evolution of Recoil.

If we make the trail abnormally long, the carriage becomes heavy and unwieldy.

We are, then, left with the last alternative, namely, to reduce the force of recoil.

Fortunately this is a practical proposition. In plain language, we have a certain *energy of recoil* represented by the usual formula $\frac{W.V.^2}{2g}$ which has to be absorbed in such a way that F never becomes excessive. Where is the weight of the recoiling parts, not the weight on the wheels.

The energy will have been completely absorbed when the work done in stopping the gun is equal to it. That is when $\frac{W.V.^2}{2g}$ where S is the distance the gun travels back and F is the *average* force of recoil.

At first sight, the best condition would appear to be to keep F uniform and to make S as long as possible, but it must be remembered that as the gun recoils the weight on the wheels becomes less, which renders it necessary to reduce the force of recoil slightly towards the end of the run in order to prevent the gun turning over.

Until recently, the desired end was effected by means of a cylinder filled with oil through which a plunger travelled as the gun recoils. The oil was forced through a port, or space between the plunger and the cylinder, and this gradually brought the gun to a stand still. The gun was returned to the firing position by means of springs which were compressed during recoil.

The chief objection to this method lay in the running-out springs which were liable to get broken or to take a permanent set with continued firing.

The latest method depends on compressed air for its action.

There are three cylinders: —

- (1) Buffer cylinder.
- (2) Air reservoir.
- (3) Recuperator cylinder.

The general principle is simple but the drawings all appear very complicated.

The buffer functions in the usual way and is quite separate from the recuperator system.

When the gun recoils it draws the recuperator cylinder over its piston which is stationary. The oil in the recuperator cylinder is thus forced through a valve into the air reservoir.

The air reservoir contains compressed air, which is separated from the oil by a floating piston. As the oil passes into the air reservoir, the piston is pressed on to the air and further compresses it.

When recoil ceases, the air re-asserts itself and returns the gun into the firing position.

The valve mentioned above (called the retarding valve) is closed during the run up, but it has holes in its head to allow the liquid to pass gradually through. This is with a view to preventing the gun running up too quickly, until the control plunger on the buffer piston-rod comes into play.

The initial air pressure in the 18 pr. is 600 lbs. per square inch.

The advantage of the air recuperator system over the buffer and running out springs lies in the elimination of the springs, which, as previously mentioned, were liable to get broken or to take a permanent set. This necessitated replacing the spring, which is a long and tedious job as well as entailing the provision of new springs.

With the air recuperator, the air pressure is obtained by means of a pump, thus removing the necessity for weighty spare stores. The recoil and run-out are also more even.

It is possible that we may eventually find that our gun carriages are getting too complicated and that too high a class of skilled labour is necessary to keep them in an efficient condition but expert mechanics are becoming more and more available due to the advance of education, and until we exceed the limit to, which we can go, it is difficult to know that we have reached it.

This article has no pretensions to be a complete account of the various systems of recoil nor has there been any attempt to describe any mechanical details. An attempt has, however, been made to show simply the present position as regards recoil and to indicate the enormous strides which have been made in gun carriage construction, and it is hoped the attempt has not been altogether unsuccessful.

SOUTH PERSIA RIFLES.

REFERENCE TO THE KERMAN BRIGADE.

A LECTURE DELIVERED AT THE STAFF COLLEGE, QUETTA,

By Capt. C. C. Crick 109th Infantry.

To explain the position of the South Persia Rifles, a force raised, trained, and lead by British Officers, and paid for by the British Exchequer, in the middle of a neutral country with often hostile leanings, it is necessary to outline briefly the events leading up to its formation.

For many years England and Russia had been the two foreign nations most interested in Persia, and their Ministers at TEHERAN were accustomed to vie with each other for concessions and favours from the Shah and his Government. To avoid rivalry the Anglo-Russian Treaty was signed in 1907. This divided PERSIA into Russian and British spheres of interest with a neutral zone between. The treaty was much resented in PERSIA, as it was considered that it was only a prelude to the absorption of their respective spheres into the Russian and British Empires, a fear which was in no way set at rest by the action of Russia during the next few years. The British Government's prestige in PERSIA was lowered by this treaty, and by our allowing RUSSIA to continue in her outrageous demands.

Just before the war, the North was policed by Persian Cossacks officered by Russians, and the South by Gendarmes officered by Swedes. The Germans had established Consulates on the Gulf and in other parts. When the war started a combined mission from the Central Powers arrived in Persia to raise the country against the Allies. The same mission had letters for the Amir of AFGHANISTAN and the chief Princes of INDIA. The mission was so far successful that, by the end of 1915, the British Consuls with the Allied and Neutral European Colonies had to be withdrawn from ISFAHAN, YEZD and KERMAN. The colony at SHIRAZ had been captured by the Gendarmes who under thier

Swedish Officers were very pro-German. At this time German influence was paramount in SOUTH PERSIA, except at the ports. Seven out of the seventeen branches of the Imperial Bank of Persia had fallen into enemy hands. It was estimated that there were 300 Germans and Austrians, with about 50 Turks and Indian seditionists, in the country, with perhaps 1,000 Persian levies. Northern PERSIA was overrun by the contending Russian and Turkish armies. There the positions was fairly satisfactory for the Allies

The question of the maintenance of law and order was discussed with the Persian Government, and early in 1916 it was decided to send a mission to the country, with the object of restoring our prestige, rounding up the German mission and of raising a Persian force to take the place of the Gendarmerie, who had either joined the enemy or dispersed. owing to the lack of pay. Br.-General Sir P. Sykes was appointed commander and landed at BANDAR ABBAS in March 1916 with 3 British Officers, 3 Indian Officers and 20 Indian N.C.Os. and an escort of 25 Sowars of the C.I.H. Recruiting began at once.

2. General description.

The South Persia Rifles were intended to be a regular force organized, equipped and trained on similar lines to the British Army. The original idea was that it should consist of a division of 11,000 men, but at no period did its numbers exceed 8,000.

Divisional Headquarters were at SHIRAZ. There were two Brigades, the FARIS Brigade with Headquarters at SHIRAZ, and the KERMAN Brigade at KERMAN. The latter eventually consisted of:—

One Cavalry Regiment.

Two Infantry Regiments.

One Pack Battery. 4 10 pr. guns.

One Machine Gun Squadron. 2-sections of 2 guns.

One Engineer Company.

One Pack Mule Corps with cart section.

Two Donkey Corps.

Medical Corps organized as a Field Ambulance.

Veterinary Corps.

South Persian Rifles.

The Brigade was started in July 1916 by 4 British officers, 1 Indian officer and a few Indian N. C. Os.; there was no S. & T. officers or personnel and no clerks of any sort. From these small beginnings the brigade grew until it had a ration strength of about 3,000, excluding attached Indian units, with 25 British officers and 50 to 60 British N. C. Os. and a large staff of Indians in the Pay and Accounts offices. The 4 officers, who started the brigade, (including one M. O. and an American adventurer who had originally come out as a member of Shuster's Gendarmerie) were much overworked, and had no special training or qualifications for supply work or accounts. The result of this was extravagance and muddle from the effects of which the brigade suffered for at least three years.

The main difficulties in raising, training and maintaining the South Persian Rifles fell under five headings :—

1. The difficulty of communications.
 2. Recruiting.
 3. Training.
 4. Transport.
 5. Supplies.
3. *Communications.*—

The Provinces of KERMAN and FARS can be conveniently divided into two portions, the Garmsir and the Plateau.

The Garmsir is the low lying belt along the coast of the Persian Gulf. It is hot and barren and very unhealthy. The Persians from the plateau simply dread passing a hot weather there, and, when there, they suffer very badly from malaria. This was the principal reason why the motor road from BANDAR ABBAS to KERMAN was never finished. The most difficult section was in the Garmsir and all the Persian labour had to be withdrawn to the plateau by the middle of May. The chief product of this part of the country is dates on which men, horses and dogs live.

The hills run parallel with the coast and are extremely difficult to cross, all caravans to the interior following a few well defined routes. Most of the streams and springs are brackish and undrinkable. Practically no supplies can be obtained away from the coast without previous arrangement.

The plateau is mostly about 5,000 feet above sea level and has a climate very similar to QUETTA ; it also suffers from a perpetual lack of water. Wheat and barley are the staple crops and are grown wherever there is water. The country, excluding the deserts, consists of fairly extensive flat plains surrounded by hills and mountains, which in some cases reach a height of 14,000 feet. Some of these plains are 30 to 40 miles across. The people of the plateau are physically stronger and much more pleasant to deal with than the Garmsir is. The villages are larger and more frequent, but there are extensive uninhabited tracts.

About one-third of PERSIA is uninhabitable desert and salt waste.

Only two ports were used by the South Persia Rifles, BANDAR ABBAS and BUSHIRE, and as the road between the latter and SHIRAZ was blocked in 1916 and only re-opened in the winter 1918-19, the former was for a long time the only port.

The principal routes from BANDAR ABBAS are to KERMAN. These are three in number. The most easterly passed through RUDBAR, JIRUFT and then along the Indo-European telegraph line. This route was the longest and could only be used for KERMAN. Several stages lay in the semi-independent district of RUDBAR and it was open the whole way to the attack of Persian Baluchis who ignored the Persian Government. It was not much used by the South Persia Rifles, but was favoured by camel caravans owing to the good grazing. It was 350 miles long without any difficult passes.

The middle route runs practically due north from BANDAR ABBAS to KERMAN. Sykes' Mission went this way in 1916. Without any proper reconnaissance it was decided to build a motor road, but when it was surveyed the construction of a road was found to be quite impracticable and the western route was chosen instead. In the meantime a telegraph line had been laid along it from KERMAN to BANDAR ABBAS and as this could not be duplicated we had no means of communication with caravans on the route chiefly used. The principle obstacle was the TANG-I-IZNDAN, three marches north of BANDAR ABBAS. This is a

gorge 15 miles long through the mountains, which cannot be avoided. It is in some places only just broad enough for a laden animal and after rain there are often dangerous spates. About three marches south of KERMÁN the route crosses a mountain range by a pass of over 9,000 feet which is closed by snow in the winter. It was the postal route and was very useful in the summer for small caravans. It is 280 miles long and divided into 14 stages ; water is scarce and supplies unobtainable.

The 3rd or western route from BANDAR ABBAS was the one generally used because it was eventually selected for the motor road. Routes for SHIRAZ branched off from it at GAKUM, 6 stages out, and at SAIDABAD, the Capital of the district of SIRJAN and the 2nd town of the KERMÁN Province. This made it of the greatest importance, as it was the only line of communication for SHIRAZ when the BUSHIRE-SHIRAZ Road was closed. Routes also diverged from SAIDABAD to YEZD and the north of PERSIA. An effort was made to get the motor road through to KERMÁN and a lot of work was done in 1917, and the early months of 1918. Two labour corps arrived from INDIA about May 1918, but the hot weather, cholera and influenza much retarded the work which was eventually stopped after the armistice, when a car could get 70 miles north from BANDAR ABBAS, and 200 miles south from KERMÁN, leaving a gap of 70 miles. To the lay mind, the engineers wasted too much time in perfecting the road in easy sections, instead of pushing through some sort of a track first of all. The part left unfinished was beyond the capabilities of the Persian engineers and was by far the most difficult. The KERMÁN-SAIDABAD section, 120 miles through mountains, was kept open and in good order by the Engineer Company of the brigade. This route presented few difficulties to caravans and was 340 miles long in 21 stages. Supplies and water, although more plentiful than on the other routes, were scarce, and dumps had to be arranged if any force wanted to move up-country.

The BUSHIRE-SHIRAZ Road was considered one of the most difficult in the country ; it was 170 miles long divided into 9 or 10

stages. The road was much improved during the winter 1918-19 by the Brigade of Indian troops who had opened it up, and, I believe, one or two cars have got right through, only being man-handled for a short distance.

There is an overland route into the country from DUZDAP, the terminus of the NUSHKI Extension Railway through PERSIAN BALUCHISTAN, along the Indo-European telegraph line *via* BAM to KERMÁN. This is the way our cars reached us. It is a very difficult road as far as BAM, and the sand is so bad across the Lut, a salt desert, that special parties always had to be sent out to help the cars through. It can also be easily raided by Persian Baluchis. One convoy of cars was completely lost for 4 or 5 days. For caravans the route is at present impracticable, the stages being very long and water scanty. It might be improved, and would then be the easiest way into the KERMÁN Province from India. The distance from railhead to KERMÁN is 400 miles. An alternative route to the south of the Indo-European Telegraph Department line, *via* RIGAN and KWASH, was attempted with infantry labour, and a passable road was made as far as RIGAN, and wells dug for several stages beyond. A ten-mile river bed of loose sand and gravel proved too difficult an obstacle for our unskilled efforts.

The roads on the plateau are much better and are usually practicable for wheeled transport. The principle one used by us was from KERMÁN to SHIRAZ, *via* SAIDABAD and NIRIZ, a distance of 340 miles, which took cars three days and caravans three weeks.

I have described at some length the routes in this area as they were one of the chief factors in administering the South Persia Rifles. Everyone does not realize how primitive the Persian communications are. This was especially so in the early days of the Force. A senior civil officer landed in BANDAR ABBAS and asked the time of the next train to SHIRAZ, he was told there was no railway. Then he demanded a car, and he was told there was no road, and that he would have to ride. He said he could not ride but would walk (remarking he had once walked 20 miles in Devonshire) but when he heard the distance was 400 miles he

took the horse offered. This was returned from the first stage with a note to the effect that it was sent back as useless, as it had been issued with stirrups of unequal length. And the officer continued his journey on a donkey.

The effects of these communications may be summarized as follows :—

(1) They led to complete decentralization. The Headquarters staff from SHIRAZ were very seldom able to get to KERMAN and did not give us much help, although this was badly required at times, especially on the administrative side.

(2) The carriage of supplies, etc., from the coast, was a long costly operation requiring much transport.

(3) Escorts to convoys were months away from headquarters, and this interfered with training.

4. *Recruiting.*

The upper classes of PERSIA are educated on semi-European lines, and to a great extent ape our manners and customs. They are the governing class, and all appointments from the highest to the lowest are farmed out, graft being universal. Despite this when caught young, they make far and away better officers than did men of no family promoted from the ranks. The men we obtained, who had been trained in a Cossack officers' school at TEHERAN, were particularly good. Men of this class are as a rule clever and quick-witted, with a sense of humour, but they are always on the make and unreliable, unless carefully watched. They are good hosts and pleasant to met socially. We found the Persian Parsis and men educated in the C.M.S. Schools the best for positions of trust and those requiring administrative abilities, such as confidential head clerks and quartermasters.

The lower classes of PERSIA can be divided into two main divisions:—

(1) Townsmen and villagers.

(2) The nomadic tribes.

The townsmen were quite useless as soldiers, as they were of poor physique, no stamina, and riddled with disease.

The villagers sometimes made good soldiers, but were usually difficult to get. In many districts they were practical and in some actual, slaves of the landowners who resented very much their men being enlisted.

The best recruits were from the various nomadic tribes which are found all over PERSIA. In KERMÁN these tribes are mostly of Arab or Turkish origin. Their chiefs, unfortunately, were not as successful as officers.

On the whole the Persian did not make a good soldier, there was no military class or spirit in the country, and although he has a great opinion of himself he is not distinguished for his bravery. The men suffered from nostalgia, and it was difficult to get them to serve for any length of time out of their own district. The majority of a party of 186 recruits, who came from ISFAHAN, deserted, sooner or later, and only about 30 completed their full term of three years. Recruiting was always a difficulty. For previous formations in PERSIA recruits had been obtained by use of press gangs and I am afraid that some of our parties, especially in the early days, were little better. We had to send out Persian officers and the more recruits they obtained the more *kudos* they got, and the more money they could make. The return of every party was followed by strings of complaints of men being taken by force, some genuine and others false.

The difficulty of recruiting for infantry and artillery was increased by the cavalry, already the most popular arm, getting a higher rate of pay. No Persian will walk a yard if he can ride. This was the Swedish custom and was continued when the South Persia Rifles were originally raised.

5. Training.

The training of the brigade was based on the war time training of British and Indian units of the same arm. Similar difficulties were experienced as in the new regiments of the Indian Army, possibly in a more accentuated form. The principal difficulty was to find instructors. No Persians, although many of the officers had had previous military experience, had any knowledge of our drill or methods. The British officers, always few in number,

were at first so overwhelmed with details of organization and interior economy that they had little time to spare for training. Some of the British officers were very unsatisfactory. A large batch came from cadet units in ENGLAND, without any experience as officers. They had wasted three months at CAMBRIDGE pretending to learn Persian, but actually forgetting anything they knew about soldiering. Elementary training was principally carried out by N.C.O. Instructors. At first the N.C.Os. were Indians who were not satisfactory. Later on, British N.C.Os. were sent. The first lot were very useful for training and in a fight, but they gave a great deal of trouble and extra work. In the winter 1919-20, when the brigade was becoming efficient, another large batch of N.C.Os. was sent to us as instructors. These were, with one or two exceptions, quite hopeless and had no qualifications for teaching anything; some of them had not even attained the same standard as the Persian ranks. They were returned to INDIA, and I hope that our report on them, with an estimate of the money wasted on their travels, was shewn to the officer responsible for their despatch.

At first recruits had to be used for duties, detachments and escorts for convoys, which were often months away from Headquarters. This made training very difficult. The Persian, a quick learner, was even quicker at forgetting, and instruction had to start from the beginning after every interlude.

In 1920 a school for Persian Instructors was started in SHIRAZ, which did good work, but the journey from KERMAN each way took three to four weeks.

Despite the many difficulties, by the winter 1920-21 the Brigade had reached a fair state of efficiency, and we were able to carry out some combined training, culminating in a field firing scheme in which guns, machine guns and rifles were all used without any accidents.

6. *Transport.*

This is always an important and difficult question in PERSIA. Although the force lived as far as possible on the country, all

ordnance stores, most clothing and some rations had to be brought from INDIA. At first there was no organized transport and large quantities had to be hired. Luckily Persian hired transport is excellent, the reason being that the muleteers and camelmen are far above the average of their class in the East. The camels and mules which exist on the coast are of an inferior stamp and the men in charge are worse. The plateau contains the good transport. The rate of hire is very heavy, but one is very lucky to get such efficient transport at any price. The Persian mule will carry a useful load of $3\frac{1}{2}$ Indian maunds, and the camel one of $6\frac{1}{2}$ maunds. The disadvantages on hired transport were that it was without discipline, and liked to march and halt at its own convenience. They hated marching with troops and even objected to a small escort, if they were controlled in any way. Most parties of Indian troops moving into the country lost much of their transport and stores. When the Kerma Mule Corps was strong enough mules were sent to meet consignments of stores at BANDAR ABBAS. This was found a more satisfactory plan. As an example, on my arrival in the country I marched with a mixed caravan of hired transport which covered with difficulty 140 miles in 14 days. On my return we covered the same distance in six days.

Supply.

During the war many missions and field forces were sent to PERSIA from INDIA. For these there were three systems of supply :—

- (1) Some were fed from INDIA ;
- (2) others partly from INDIA and partly by local purchase ;
- (3) others by local purchase.

The easiest and most reliable system is by import from India, but owing to the communications it is very expensive and limit the mobility of the force.

The second system is the best when it can be worked.

Living on the country is the most tiresome and unsatisfactory system, and has shewn itself to be very expensive. It is difficult to compare the expenses of "importation" and "living on the country". Few people have the slightest idea of the enormous cost of conveying stores from the coast over a long L. of C. in a country like PERSIA. Petrol had cost £1 a gallon by the time it reached KERMÁN.

As no transport was available from INDIA, troops were scarce and hired transport was limited, the 3rd system had to be adopted. At the start, to work this in KERMÁN there was no S. & T. personnel. A contract for supplies was made with a Swiss carpet merchant. The terms were:—

- (1) The contract was for 3 years.
- (2) The contractor had the right of making all local purchases for the South Persia Rifles in KERMÁN District.
- (3) He was to receive sufficient advances of Government money.
- (4) He was to get 5 per cent on the cost of all articles.
- (5) All losses were to be borne by the State.

To begin with only very small stocks were kept in hand because of:—

- (1) The Indian system of never-buying to-day that you can possibly buy to-morrow.
- (2) The difficulty of storing and looking after stock without proper establishment.
- (3) The reluctance of grain holders to sell in large quantities, and so allow a stock to be worked up. They then knew that the stocks would not permit of our holding out against their terms, and so arranged their prices accordingly.

When we came to buying in bulk, the number of grain-holders in any one district was too small for competition; it was also a case of combination and division of profits. There are many difficulties in buying in PERSIA. The custom of the country is to buy on a *bharat*, i.e., you pay the money and get an I. O. U. for

the grain which is all the security you have. Persians are absolute experts in dishonesty. For instance :—

they mix the barley with the wheat, stones and dirt with barley and everything else, salt with the rice, sand with the tea and sugar, fats and cheap oils with the *ghee*.

Every tin or sack must be weighed and carefully inspected by a responsible person. Ordinary weighmen are no good. Even if you do this you will be done.

In January 1917 a very junior Supply officer arrived in **KERMAN** with a small staff. He carried on single-handed until December 1918, when supply units tumbled over each other into the country. Then a reserve of supplies was built up and contracts put on a business footing. The muddle of these two years, increased by the difficulty of getting any accounts from the Swiss contractor, had not been cleared up by April 1922.

If another similar force is raised, the chief thing in this connection to remember is to over-establish your supply units when you start, as the work is always very heavy at first, and then, if the force does not increase, they can be reduced when things have settled down. It is difficult to realize what a lot of work has to be done. Paying out the money is simple, but ensuring a steady flow of what you buy coming into your depots daily, in equal proportions, and seeing you get what you pay for, is quite another thing. A Persian is full of reasons why anything you buy from him must be taken delivery of all in one day. He wants to shove supplies on you at such a rate that they cannot be properly weighed or hecked.

8. *Their capabilities and uses.*

In May 1918 the South Persia Rifles, especially in **HIRAZ**, were of very little use for the following reasons :—

- (1) The **FARS** Brigade contained a large number of the old gendarmerie, who were discontented and mutinous. They all mutinied or deserted during the summer.

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- (2) The S. P. R. were unpopular with a large section of the local inhabitants, who bitterly resented the presence of foreigners, *i. e.*, British and Indian troops.
- (3) Their moral was lowered by constant adverse comparison with Indian troops.

In KERMAN, where there were no Indian units, and fewer of the old gendarmerie, the case was much better, but a bad cholera epidemic had lowered their moral to some extent. Desertion was always a common offence and about this time the number of deserters was large.

In the winter of 1918 after the flue, which was very severe in PERSIA, the S. P. R. began to look up, and in 1919, they became quite capable of performing the duties for which they were raised, the maintenance of law and order in South PERSIA. A few successful actions against the robber bands had a great effect on the general moral. The Persian is a fine marcher and can easily keep up 20 to 25 miles a day for long periods. The cavalry also can cover long distances, although they were only mounted on small Persian ponies. On one occasion, in order to effect a surprise, 2 squadrons and a machine gun sub-section marched 60 miles in 24 hours.

In KERMAN the S. P. R. had a restraining influence on two very different types of robbers :—

The first was the Governor-General and his satellites. The Governor-General of KERMAN belonged to the Bakhtiari tribe, who have a particularly unsavoury reputation as governors. The presence of the S. P. R. made him the best Governor-General they had ever had, and he only demanded reasonable bribes and presents, but since our departure he has reverted to the usual Persian methods.

The second robbers were the nomadic tribes, who might be considered hereditary highwaymen. Those tribes in the KERMAN Province who lived within a few days march of the S. P. R. columns amended their ways, and became our best soldiers.

9. The political point of view.

The situation of the S. P. R. was, at times, very curious. Although the Persian Government had concurred in the formation of this force, that cabinet had fallen before the first man had been enlisted and an anti-British cabinet had taken its place. This resulted in the S. P. R. not being officially recognised by the Persian Government for two years. The attitude by the Government varied according to the pro-British or the pro-German leanings of the cabinet in power for the moment and as a cabinet seldom lasted for more than two months it was rather hard to keep pace with our position.

In Persia everyone takes an interest in politics, and "intrigue bazi", as it is called, is a most fascinating game. This had a bad effect on the S. P. R. as some officers spent far more time in interfering with and trying to control the local politics than in attending their proper duties of organization and training.

10. Disbandment.

The force was disbanded during 1921, and that this was effected without trouble was due to its high state of discipline. Usually, when a military force breaks up in PERSIA, everyone ² seizes what he can, especially horses, saddles and rifles, and makes for his home or other likely spot where he can start the profitable trade of highway robbery. During the disbandment of the S. P. R. nothing was stolen and the last men to be disbanded acted as escort to the coast and were paid off there.

Since the disbandment, British prestige in South PERSIA has been very low and our Consuls are having a difficult time to maintain our interests. The men of the S. P. R. did not suffer for having served under us, and I am sure they would rejoin in large numbers, if we raised another force there.

11. Conclusion and lessons.

As it is quite possible that at some period a similar force may be raised, either in PERSIA or elsewhere, a few of the lessons are worth considering :—

- (1) The first is the choice of the commander ; he must be a practical soldier and not a politician, who does his

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work of organizing and training the force ; if he knows the country and the people, so much the better, but his soldierly qualities are the most important.

- (2) Start off with a sufficient staff, particularly as regards S. & T. and accounts. No training will be done if your officers are all doing *babu* work.
- (3) Don't run before you can walk. Four officers in KERMAN started the following simultaneously :—
 - A Cavalry Regiment.
 - A Infantry Battalion.
 - A Battery.
 - A Hospital.

They also carried out supply, transport and various other duties.

- (4) Avoid unnecessary extravagance. Large sums were wasted in the early days of the S. P. R.
- (5) Get suitable officers and N.C.Os.

It is sad to think of the 5 years' hard work, and of the money which were wasted on the South Persia Rifles, which were disbanded just as they were becoming a really good force. It was generally admitted to be the best trained and disciplined force that Persia has had in modern times. Most of us were sorry to leave as we liked the country and the people, although we all knew that they were unreliable and untrustworthy.

C. C. C.

CRITICISM OF "A MINISTRY OF DEFENCE ?"

(JANUARY 1923.)

With the general trend of the arguments of the author of "A Ministry of Defence ?" most thinking citizens of the Empire will wholeheartedly agree. This criticism deals only with one aspect of the subject—the position and status of the Chief of the National Defence Staff. Incidentally the term "National" Defence Staff seems ill-chosen. If the Defence Staff is to be the live wire in our defence organization, which it should be, its policy must visualize the Empire as a whole, and its personnel must include representatives from all sections of the Empire. The term "Imperial" therefore seems a happier epithet than "National".

The author of "A Ministry of Defence ?" states that the Chief of the Defence Staff should submit his professional opinion to the Minister of Defence. Though this system may be the most suitable in peace, it is open to argument whether or not it is in the highest interests of the state in time of war.

A comparison of the systems existing in Great Britain and other European powers during the last hundred years will be of assistance in coming to a conclusion on this question.

In England at the time of Waterloo it was the function of the Department of the Secretary of State for War and the Colonies, whose establishment consisted of one Under-Secretary, six clerks and a private secretary, "to correspond with commanders of armies engaged in war, and to plan and arrange all military operations abroad". This system remained virtually unchanged until after the South African War, although a Secretary of State for War alone was appointed in 1854, the control of the Colonies remaining with the older department.

Lord Salisbury was a statesman, who realized the shortcomings of our organization for the higher direction of war. Speaking in the House of Lords in 1900, he said :—" I do not think the

British constitution as at present worked is a good fighting machine.....it becomes us to think whether we must not in some degree modify our arrangements in order to enable ourselves to meet the dangers that at any moment may arise." The truth of Lord Salisbury's words was fully proved in the Great War. The establishment of a General Staff and a Committee of Imperial Defence had gone some of the way towards solving the problem, but without doubt our system of conducting war broke down.

The nature of its constitution has complicated this problem for the British nation. The Emperor Napoleon was his own legislature and his own executive. His brain alone planned a campaign, co-ordinated the military considerations with those of other departments of the state, and controlled the execution of the plan. When the French at a later period adopted a Republican form of government, they were faced with problems analogous to our own.

The German system was absolute and simple throughout the 19th century and up till 1918. The sovereign was Head of the State. The Imperial Chancellor and the Chief of the Great General Staff were both directly and equally responsible to the sovereign, who was the co-ordinating authority. It must be remembered that in Germany the Great General Staff was not part of the War Ministry. The later body was only responsible for administration.

In the British constitution, on the other hand, the supreme executive body is the Cabinet, with the Prime Minister at its head. Soon after war broke out in 1914, it became apparent that the large unwieldy Cabinet of some 20 members was most unsuited to the conduct of war. Next came the phase of an improvised "War Council" responsible to the Cabinet. Finally in 1916, a "War Cabinet" was formed consisting of six or seven members of the Cabinet (some without portfolio). This body proved fairly well suited to its function of the supreme executive body of the Empire in war time.

Now, it is agreed that the supreme professional adviser to this executive body should be the Chief of the Defence Staff, as

soon as such a staff is formed. The question at issue is to whom this advice should be tendered.

When Sir William Robertson became Chief of the Imperial General Staff in December 1915, the status of this office was modified in Order to bring the General Staff into closer touch with the Cabinet. An order in Council made the Chief of the Imperial General Staff responsible for issuing the orders of the Government in regard to military operations to Commanders-in-Chief in the field. At this time--and throughout the war--both the First Sea Lord and the Chief of the Imperial General Staff tendered their professional opinions direct to the supreme executive. The system, however, is not logical. It gives these officers two functions. In the first place they are independent advisers to the Government, and secondly they are members of the bodies responsible for the administration of the Navy and Army respectively. In the former function they may conceivably give opinions counter to those of the bodies to which they belong in their second function. When the Royal Air Force was formed as a separate service on April 1st, 1918, a third strategical adviser to the Government appeared. The Chief of the Air Staff held an analogous position to that of the First Sea Lord and the Chief of the Imperial General Staff, and the same disadvantages were inherent in his position.

These reflections show that the status of the Chief of the Defence Staff must be very carefully considered before our new organization is finally shaped. In the first place the Defence Staff itself must consist of the machinery, from which is evolved the considered professional opinion to be tendered by its Chief. In view of the reasons discussed above, it is considered that this machinery must be divorced from that dealing with the administration of the armed forces.

Now, constitutionally the Chief of the Defence Staff must be under the Minister of Defence. It may be argued that the Minister of Defence should tender the former's professional opinion to the Government. But if this procedure is adopted, the Minister of Defence is (or should be) merely acting as the mouthpiece of another man. In that case it is surely better for that other man to

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tender his opinion himself. Only then is the professional adviser in a position really to take his proper place in the councils of the Empire. To what extent he should press his opinion has been a much-discussed question, which can be studied in the pages of the Report of the Dardanelle's Commission and in Sir William Robertson's inspiring autobiography. It may, however, be concluded that in the future the country will not consider a professional adviser is fulfilling his whole duty, if he makes no protest in council against professional views expressed by his political chief, which are opposed to his own.

It has been argued that the strategical adviser to the supreme executive should be a member of the Government. This does not seem in consonance with our constitutional system. Ministers of the Crown have always been members of the Legislature, and this principle has been carried on in the latest constitutional measure passed by Parliament (Government of India Act, 1919. Sec. 4—(2).

The Chief of the General Staff could without doubt carry out his duties if he remained an adviser to the executive, provided that it was clearly understood that all plans for the use of the armed forces, emanating from whatever source, should be sifted and presented by him alone.

To sum up, it is considered that the Chief of the Defence Staff should only have one function and that in war time his professional opinion as strategical adviser to the Government should be given direct to the supreme executive body and not through the Minister of Defence.

MARKWISS.

REVIEWS.

"THE OFFICIAL HISTORY OF AUSTRALIA IN THE LATE WAR OF 1914-18, VOL. I., THE STORY OF ANZAC."

By C. E. W. BEAN.

(Messrs. Angus & Robertson, Ltd., 89, Castlereagh Street, Sydney).

In the production of her own war history Australia has judged fit to make something of a departure from the established practice in England, for Mr. Bean acknowledges in his preface "absolute freedom (except in the case of the naval volume) from all censorship". As far as may be judged from this initial volume, the results are gratifying, in that its liberty of narration and comment should assure to it a wider and more appreciative audience than sometimes meets studiously worded official communiques. Nor is any occasion in evidence in the text where the privilege accorded has been abused.

The present work covers only a short period of the Gallipoli operations, from the landing at Gaba Tepe on April 25th until the early days of May. Its initial chapters are, however, of great value, as they deal in considerable detail with the whole raising of the Australian Imperial Force, from the very commencement. The situation and circumstances of Australia are set forth clearly and concisely, and this part of the history affords a valuable study of the conditions and difficulties in which a great Dominion possessed of an almost negligible standing army set out, of its own free will, to raise large forces at short notice for participation in what was recognised at the outset as a tremendous war.

Despite the freedom of style allowed, and the length permitted to him (this first volume runs to over six-hundred pages) Mr. Bean indulges little in journalistic tendencies. His book is above all straightforward and explanatory. Whilst it contains more detail

and local colour than would probably be found in a corresponding publication at Home, it makes the picture satisfactorily clear and conveys a thorough understanding of the peculiar position of a self-governing dominion joining in an Imperial world war. The effort of Australia as thus portrayed is an object lesson.

All military aspects of the operations are faithfully dealt with. Strategy, tactics, and administration are related with painstaking completeness, and the text is supplemented with numerous maps and sketch maps in addition to a comprehensive index. There are, too numerous photographs both of men and of places, quite dissociated from the old-time idea that an official history must be as dry as dust.

The entire form of the book, and its evident and successful attempt at attractiveness, warrant perhaps the surmise that it has been written for the nation rather than for the military student in particular. Whilst this most commendable move should ensure that the public get their military information and ideas from a sound source instead of, as hitherto, from uninstructed and often misled amateurs, the professional soldier will still find all that he requires, for the author's information has been obtained from the best quarters, including Generals Birdwood, W. T. Bridges, Chauvel, Monash, White, &c.

One may therefore commend the volume unhesitatingly to all military students and institutions. A note is due to its special value to British officers, which is that it gives upon all things concerned the Australian point of view put clearly by an Australian. Those who read the book diligently will learn a great deal more than mere military history, they will acquire much more than a superficial knowledge of their brothers in arms of the dominion, a most important asset to the soldier of to-day.

A GEOGRAPHY OF IMPERIAL DEFENCE, VAUGHAN CORNISH.

Dr. Vaughan Cornish's latest publication is a study of the Geography of the World in its relation to certain aspects of Imperial Defence. He begins by a treatise on the effect of climate on population ; how many of us appreciate the fact that practically half the inhabitants of the world live in the Asiatic monsoon region of India and China? He then proceeds to discuss the effect of geographical conditions on efficiency, and to explain how and why the Western races have acquired their present ascendancy of Orientals. It is perhaps a trifle disconcerting to be warned 'against the assumption that no Orientals besides the Japanese will regain equality with Occidentals.' The Author does not mince matters and states with conviction that force alone will enable us to maintain the ideal of a White Australia. Another danger which he foresees for the Empire is a Russo-German combination making a simultaneous attack on India and the British Isles, and he paints in rather lurid colours the vulnerability of our crowded Home-land to aerial bombardment, hostile aircraft in their thousands reducing our great cities one by one to ashes.

There is abundance of food for thought in his suggestions as to the way in which we may hope to avoid the numerous pit-falls that lie in our path. The advocates of an independent Air Force and a subsidized aircraft industry find in him an eager advocate. Some of his suggestions may seem less practical, as when he warns as to increase the size of our families and to establish a white peasantry throughout the White Man's countries in order that the White Man's ideals may prevail throughout the World, but few will deny the necessity of organised immigration to the empty continent.

This is a book that will make the student think hard, whether he is interested in World politics or in passing his Examination for promotion or for entrance to the Staff College.

**" OVERSEAS VISITOR'S GUIDE TO LONDON AND
THE BRITISH ISLES. "**

By Alwyn Pride.

PUBLISHED BY MESSRS. GROOM & Co., 15 CHARING CROSS, LONDON.

This excellent little book is worthy of attention, containing as it does much of general interest to travellers and others. The chapters on " London through the Centuries " with a short description of the old churches in the city, and the source of origin of some of its quaintly named streets, buildings, houses of note, etc.; are very amusing. The chief cities and their cathedrals, with the different style of architecture to be seen at each, are well described.

The Thames valley—and Shakespeare's country, also the South and East Coast resorts, and the chief places of interest in Scotland and Wales, with their various merits attached, have all been mentioned.

The illustrations, especially those reproduced from air photos are very good and clear. Maps have been given of the London omnibus routes, and the underground railway; also the addresses of many hotels, residential clubs, etc; and the best shopping centres. The book will be found useful for reference when travelling, and can be carried in the pocket.

MILITAR WOCHENBLATT.

22ND JULY, 1922

'THE RUSSIAN ARMY IN THE WORLD WAR.'

By General von Kuhl.

This article is a review of a book by a French Professor, Legras, on his experiences of the Russian Army during the Great War, most of the first-half of which he spent in Russia, whither he had been sent by the French Government to conduct a propaganda for the purpose of making clear to the Russian Army and people the greatness of France's war effort.

While uttering a warning to those of the critics who are apt to belittle the doings of the Russian Army before the Revolution because of its complete collapse at a later date, Legras points out the impossibility of Russia putting out her full strength under the

hide-bound direction of such men as Kuropatkin, Evert, and similar mediocrities. The Russian generals were very variable in value, but the majority were either too old or too fond of the office stool. But the essential weeding out was an impossibility under men of the Kuropatkin type.

It is, however, the officers of the Russian Army who come in for the severest criticism. Fond of their own pleasures and careless of the comfort of their men, they allowed from the beginning numerous breaches of discipline which gradually impaired the fighting value of the army and undermined its loyalty. As the regular officers became fewer and their places were taken by men of little military training, who had only the doubtful example of the regulars to learn from, these abuses gradually became more and more serious, and the break-up of the whole army in the Revolution was a natural consequence.

The Russian staff officers were so out of touch with the fighting troops that Legras describes them as speaking practically a different language from the regimental officers.

‘THE TRAINING OF LEADERS.’

By Julius Frontinus.

Before the war the German Army and its leaders were trained exclusively in open warfare. This fact has been made the basis of many accusations against the German system of training, and the author defends the old system as far as it concerned training in leadership against these attacks. Wars are mainly won by movement and superior mobility, and it was a wise step on the German part to confine the training of leaders chiefly to these ends, even if the training resulted in the conjuring up of unnatural situations. These situations were realised by the thinking soldier to be unnatural, and their existence did him no harm.

All peace training aims not so much at teaching the beginner something correct as at exercising his powers of quick decision and developing his will. The object is not so much to make leaders out of the available material, as to find out those who are suited to be leaders. This can only be done by training in open warfare.

**INCREASE OF THE RATES OF COMPENSATION FOR DEARNESS OF
LIVING COMING INTO FORCE ON JUNE 1ST, 1922.**

By Major von Roques.

The author details the increases just granted which are by no means ungenerous, but deplores that the cost of living is increasing at a rate out of proportion to the concessions granted. Proposals for further increases are already said to have been put up to the Finance Minister.

'ON WHAT PRINCIPLES SHOULD INFANTRY TACTICS BE BASED ?

By a young Officer.

The writer discusses the theme that the basis of infantry tactics is the capacity for adapting one's forces as a whole and each individual man in particular to the nature of the ground in the best possible manner, having regard to the enemy's dispositions.

29TH JULY, 1922.

'THE STRUGGLE OF IDEAS, CATCHWORDS AND COLOURS.'

By Lt.-General von Altrock.

The author takes as his theme the sad state of Germany at the present time and appeals to all parties to unite in pulling their country together. Germany is split by domestic intrigue into three main divisions, Republicans, Monarchists and Communists. Each follows its own idea and has its own catchwords; each has its own colours, the new black, red and gold of the German Republic, the black, white and red of Imperial Germany, and the red of the Third International. The author deplores the fact that of these it is the black, white and red which counts fewest supporters. The only flags which appear to count are the black, white and red of reaction and the plain red of Bolshevism.

The danger of the triumph of the red flag through the quarrels which are raging between Republicans and Monarchists is used as the text for a sermon on national unity. First all Germans must unite to carry their country through the distressful days which the war has brought upon her. When Germany is once again firmly established as a nation, then it will be time to consider what form of constitution will best suit her in the future.

'HANS DELBRÜCK versus LUDENDORFF.'

By Professor Dr. Karl Berger.

The well-known German historian, Delbrück, recently published an attack on the German system as it existed before and during the Great War under the title of 'Ludendorff's Portrait of Himself.' The title speaks for itself. Ludendorff was singled out as the type of the old system and received a volley of abuse, somewhat out of keeping with the lavish praise showered upon him by the German people at the end of the war. Professor Berger, while lamenting that it should be possible for a German to forget so soon the valiant deeds of the wartime heroes, rejoices that Delbrück's calumnies have been contradicted with such vigour by two military writers, who have succeeded in discrediting Delbrück.

'THE LAW REGARDING THE PENSIONS OF PRE-WAR PENSIONERS'

By Major von Roques.

An article giving the details of an act increasing the pensions of military pensioners, whose pensions on the pre-war scale had become totally insufficient to meet the present cost of living in Germany.

'THE AMERICAN ANTI-AIRCRAFT ARTILLERY.'

A note giving details of the various types of anti-aircraft guns in use in the United States Forces. America is rightly paying primary attention to the question of muzzle velocity in this type of gun. This is a natural outcome of the experiences of the war, and is a point on which the Germans were none too quick in

making progress at the time. In spite of this, however, there was a progressive improvement in the German anti aircraft defence, as the following figures of the number of enemy aircraft brought down by the German artillery testify :—

1915—51 aeroplanes. 1 airship. 1916—322 aeroplanes, 1 airship
1917,—467 aeroplanes, 1918,—748 aeroplanes. Total 1,588 aeroplanes and 2 airships.

12TH AUGUST, 1922.

'NO MORE WAR. ABOLISH THE REICHSWEHR.'

By Lt.-General von Altröck.

These phrases are catchwords only too frequently on the lips of Social Democrats and others in Germany. While other nations are increasing their armies, Germany, defenceless thanks to the Treaty of Versailles, holds demonstrations against war. The 100,000 men of the Reichswehr, the only army now allowed to Germany, have become an object of popular abuse. If this last bulwark is abolished, then Germany will inevitably become like Soviet Russia. Let the Social Democrats and those who demand its disappearance take heed in time and rather divert their efforts to a better channel, the reconstruction of their country.

'THE FRENCH VIEW OF CAVALRY IN WAR.'

By Lt.-General von Poseck, Inspector of Cavalry.

The first instalment of a reply to an article in the 'Revue des deux Mondes' by General Féraud, French Inspector-General of Cavalry, in which the writer had sought to prove the superiority of the French cavalry over the German during the early operations in Belgium and France. The German General declares, and quotes instances to prove his assertion, that in the opening phases of the operations the French cavalry did nothing to delay the German advance and never came near enough to the German cavalry screen to have any chance of obtaining any information.

'GERMANY'S AIRCRAFT INDUSTRY AND THE WAR WITHOUT END.'

A complaint against the crippling of the aircraft industry in Germany by the terms of the Treaty of Versailles. Even when the Allies allow the Germans to start this industry again, the latter will have an almost impossible amount of leeway to make up.

19TH AUGUST, 1922.

'IMPORTANT MILITARY MISTAKES IN TSARIST RUSSIA.'

A review of an article under the above title by the Tsarist General Rostovtseff, which appeared in the 'Revue Militaire Générale' and in which the chief points of weakness in the organisation and administration of the Russian Army are described. For example the writer states that the second-line reserve divisions were sent into the line badly officered, and, except in artillery, badly equipped. In consequence they suffered at the outset such heavy casualties that they were never able to recover and again become really effective formations. The regular Russian officers were excellent and knew their job. The charges of brutality levelled against them are ridiculous. Their treatment of their men, though somewhat patriarchal, was good, as also were the relations between officer and man. But their numbers were soon depleted by casualties and there were practically none of them left to train and lead the third-line divisions. The arrangement for the supply of reinforcements to units left much to be desired. Men were sent into the line who had never before handled a rifle, and there was no proper system for the provision of reinforcements, drafts being sent up haphazard from depots and reserve formations to any unit in any part of the line. The weak point of the regimental organisation was that too little attention had been paid to specialists with the result that regiments found themselves short of trained machine-gunners, signallers, etc. Add to these defects the shortage of artillery, the lack of munitions and the insufficiency of the Russian railway system, and it will be seen with what insuperable difficulties the Russian commanders had to

contend. General Rostovtseff lays the chief blame for these shortcomings on the commission which sat to consider the lessons to be learnt from the Russo-Japanese War. This commission paid more attention to points of tactics than of administration, and so allowed Russia to wander on in a sense of false security to the catastrophe of 1917.

'THE FRENCH VIEW OF CAVALRY IN WAR.'

By Lt.-General von Poseck, Inspector of Cavalry.'

The concluding instalment of the article which commenced in the issue of July 29th.

'ENGLAND'S AIR POWER.'

A series of extracts from the 'Times' and from speeches in the House of Commons.

MILITARY AND POLITICAL NOTES FROM ITALY.

By Lt.-General von Winterfeldt.

A short note on the new organisation of the Italian Army and on Italian foreign policy.

26TH AUGUST, 1922.

'DEFENCE POLICY IN THE PACIFIC.'

By Professor Dr. Karl Haushofer.

In this article the recent reductions in the Japanese Army which followed on the decisions of the Washington Conference are discussed in detail, and Japan is held up to the Powers as a whole and to France in particular as the first country of any importance to reduce her land forces appreciably and to cut down her military budget. The Christian Powers are exhorted to follow her lead.

'THE TRAINING OF THE MIND.'*By Lieutenant Kurt Hesse.*

The Reichswehr, the new German army, requires owing to the smallness of its effectives that every man shall be trained to use his intelligence to the utmost. Before the war every regiment and every company in the German Army had its blockheads, who were like machines, never thinking for themselves and obeying orders like automata. The men of the new Army have a higher standard of intelligence, and they must all be made to think for themselves and to understand the reason for everything going on around them. This needs training on definite lines. Reichswehr officers complain that they are already overburdened with work, but they must find time for this essential addition to their duties.

'THE WORLD WAR AS VIEWED BY OUR ENEMIES'*By Lt.-Colonel Wolfgang Foerster.*

A review of General von Kuhl's book bearing the above title, which is based on a series of articles, written as supplements to the *Militär-Wochenblatt*, on the British and French War literature, and published early this year with additions up to the end of 1921. According to the present review the book would appear to a valuable addition to military history, being written with a view to elucidating the German mistakes during the war in the light of all available evidence in order to prevent their recurrence in future.

**'THE FURTHER INCREASE IN THE RATES OF COMPENSATION FOR
DEARNESS OF LIVING.'**

The further increases in this direction foreshadowed in the July 29th issue of the *Militär-Wochenblatt* were not long in becoming an accomplished fact as a result of the rapid decline in the value of the mark and the consequent increase in the cost of living.

'FOREIGN COMMENTS ON THE TRIALS OF WAR CRIMINALS.'

A series of extracts from English, Italian, Dutch and even French books and newspapers, testifying to the fairness of the Leipzig trials.

2ND SEPTEMBER, 1922.

INTERNAL UNITY—AGAINST THE VERSAILLES TREATY.*By Lieut.-General von Altrock.*

France, says the writer, is not content with detaching the Rhineland from Germany, but aims at her gradual destruction. To this end she has utilised the present period of disarmament to make herself the greatest military power in Europe. Germany on the other hand is helpless. The Versailles Treaty has deprived her of all power of resistance against attack from outside. Yet the situation in Europe cannot become normal until the reconstruction of Germany is complete. This gives Germans an opportunity to press for the revision of the peace treaty. Germany must carry on a spiritual fight against the oppression of the treaty and against the false allegation that Germany alone was responsible for the war. While the various parties within the country are pulling against one another, such a fight is impossible. All Germans must sink their differences and struggle together to secure a revision of the treaty.

MILITARY AND POLITICAL NEWS FROM POLAND AND THE BORDER STATES.

April to June, 1922. By Lieut.-General von Winterfeldt. A pessimistic account of the present position in Poland, which has deteriorated mainly through the Polish failure to obtain any advantages from Russia at the Genoa Conference, through the unsatisfactory commercial treaty with France, and through Poland's failure to come to satisfactory agreements with Lithuania and the other border States. The writer would clearly have one believe that all the Polish troubles are due to France.

THE BEST ANSWER TO POINCARÉ.

An appeal for the issue by the German Government of their list of Allied war criminals.

THE TRAINING OF THE MIND. BY LIEUTENANT KURT HESSE.

The concluding portion of an article which commenced in the previous number of the *Militär-Wochenblatt*. An appeal for the higher education of rank and file, the inclusion of training in

psychology in the Cadet Schools to give all officers a broader outlook, the granting of facilities to regular officers to undergo courses at the universities to continue this process and to make them more valuable as instructors on general subjects, and finally the increase of the almost non-existent literature on psychological matters as they effect the army.

9TH SEPTEMBER, 1922.

THE MILITARY AND POLITICAL POSITION OF GREAT BRITAIN UP
TO THE MIDDLE OF AUGUST, 1922. PART I.

By Lieut.-General Balck.

After dealing with the differences which have recently arisen between France and Great Britain, and after declaring that Great Britain is forced through fear of French military power to avoid a break with her, the writer goes on to point out that Great Britain has been forced to draw closer to Italy in order that between them they may be able to check the French desire for world domination.

The Irish treaty is described as a 'masterly example of the usual British policy of 'Divide et Impera.'

The change of front shown by the British representatives at the Near East Conference in Paris, which is ascribed directly to the attitude adopted by the Indian Government, has caused the Turks, encouraged by France, to hold out for the complete fulfilment of all their claims.

The recent vigorous measures adopted in India have prevented the outbreak which was generally feared. But the present calm is probably only a lull before the storm. The serious cases of indiscipline in three Indian regiments are clear proofs of the lessening of British prestige in India consequent on Gandhi's passive resistance movement. Moreover the British Commander-in-Chief has demanded the strengthening of the British troops in India and has ordered the arming of the white population and the formation of volunteer corps.

The general outlook of the British in India is, according to the writer, who quotes Lord Sydenham, one of re-action. But any attempt to stay the course of history can only fail. It is therefore to be expected that the movement started by Gandhi will raise its head again in new forms and under new leadership.

THE STRUCTURE OF THE ARMY.

Even in peace time there was a natural tendency in the German Army for regimental officers to look for extra-regimental employment, and during the war the increase in the number of staffs of necessity drew away from the fighting troops the majority of regular officers. The result has been that the rank and file have come to feel less respect than formerly for their officers and more for their N. C. Os., the N. C. O. has obtained an exaggerated idea of his own position, and the officer is inclined to look down on his main duties, those of the regiment. This development is seriously affecting the new German Army, and is one out of which the Socialist parties have begun to make capital. How is this to be combatted? Firstly officers must not be allowed to disappear to staff appointment for excessive periods. Secondly greater responsibility must be given to the N. C. Os., and their services utilised to the full in routine and clerical matters, so that the officers, relieved from their office stools, can give most of their attention to the training of their men.

THE ORGANISATION OF THE POLES IN GERMANY.

The writer describes the extremely widespread organisation, educational, social and political, which the Poles resident in Germany have developed for their own benefit and for the encouragement of the Polish national spirit.

GERMANY IN POLAND.

In contradistinction to the Poles in Germany, Germans in Poland are the objects of a definite hostility on the part of the Polish Government, which aims at the complete eradication of everything German from the country.

REGIMENTAL SONGS, CUSTOMS AND USAGES OF THE OLD ARMY.

A few notes on the regimental customs and songs of the pre-war German Army.

16TH SEPTEMBER, 1922.

DEFENCE AND MUNITIONS, 1914-1918.

By General von Kuhl.

A review of a book entitled 'Wehr und Waffen, 1914-1918' by General von Wrisberg who throughout the war was at the German War Office in charge of all ordnance supplies to the German army at the front, describing the difficulties and achievements of his department during the war.

THE MILITARY AND POLITICAL POSITION OF GREAT BRITAIN.

Part II.

After a detailed account of the reductions which have taken place in the British Army and Navy, which represent the first sign of real disarmament on the part of any of the victors in the Great War, the writer goes on to point out the weakness of the British air forces as compared with those of France. This is a most dangerous position for Great Britain in view of the recent successful experiments intended to demonstrate the vulnerability of warships to attack by aircraft.

MILITARY AND POLITICAL NEWS FROM SWITZERLAND.

A few notes on recent events in Switzerland.

THE WHOLE GUILT OR ONLY A SHARE?

By Dr. Herbert Stegemann.

There are at present two views in Germany as regards the responsibility of that country for the war. The one party claims that Germany was entirely guiltless, while the other, composed mainly of socialists and such like, holds that Germany was in part responsible. These differences must disappear and all Germans must work together to prove the Allied guilt and to get the Versailles Treaty rescinded. At any rate Germany is the only one of the belligerent countries which has had the courage to publish its Foreign Office records up to the outbreak of war.

PSYCHOLOGY AND TACTICS.

A further article on the importance of the study of Psychology by officers, and on the necessity for all troops to know exactly what is going on around them and why events take place.

CIVIL EDUCATION IN THE ARMY.

Further regulations have recently been issued in Germany regarding the training for civil occupations of all voluntarily enlisted soldiers. This training is to begin in the fourth year of service and is divided into three stages, of which, however, the first alone is compulsory.

WISSEN UND WEHR.

AUGUST, 1922.

'THE RUSSIAN ARMY IN 1917 AND THE REVOLUTION.'

A. review of Major-General Knox's book, 'With the Russian Army, 1914-1917'.

**THE MILITARY IMPORTANCE OF RAILWAY AND INLAND WATER
COMMUNICATIONS, AS EXEMPLIFIED IN THE CAMPAIGN
IN RUMANIA IN 1916.**

By Colonel von Velsen.

A detailed technical account of the working of the railways and to a lesser extent of the German inland water transport during the operations leading up to the crushing of Rumania, showing the important part played by the defective railway systems along both sides of the Rumanian frontier and the methods by which the Germans succeeded in getting the fullest value out of them. The writer makes it clear to what a very appreciable extent the lack of railways forced the German G. H. Q. to adopt their original plan of campaign, and at a later date after the battle of Kronstadt decided them to discontinue their offensive in that direction and to transfer their main attention to forcing an entrance into Rumania in the direction of the Szurdok Pass further to the west. The utilisation of the available railways for the concentration against Rumania, for the campaign itself and for the transfer of troops back to the western front to meet the Allied offensive in the spring of 1917, are looked upon as masterpiece of German organising efficiency.

**'THE PEACE ARMIES OF THE VICTORS AND VANQUISHED IN THE
WORLD WAR.'**

By Erwin Hermann.

The commencement of a series of notes on the new army organisations now being introduced in the various countries which participated in the Great War. The present number contains notes on the French and Belgian armies.

"A CHAPTER OF MISFORTUNES."

(MAJOR-GENERAL BIRD, C.B., C.M.G., D.S.O.,—FORSTER
GROOM, 8/6).

The earlier campaigns of Mesopotamia, varied and extensive as they were, have not had the critical examination that they deserve, so swamped have they been, in the interests of the larger events of the war. Those campaigns may properly be divided into three phases: first the operations of the landing and occupations of Basra, the Turkish return and attempt to drive the British into the sea, with the decisive battle of Shaiba (so important, so far reaching, that some day from its effects, it will be ranked as one of the decisive battles of the war, and therefore of the world.) Sir John Nixon's strike for room, the occupation of Nasiriyah, of Amara and the relief of Awaz. Second comes the advance from Amara to Ctesiphon, the retreat to Kut after Townsend's fierce final battle, the defence of Kut and the long heartbreaking series of attempts to relieve Kut. Thirdly comes the great campaign, the determination of those who understood logistics, to fight modern war in a modern way, with its resulting capture of Baghdad and finally Mosul, after the destruction of many Turkish divisions. This third phases secondary or indeed lower even in its importance, was from the numbers and resources engaged the biggest war ever previously engaged in by Great Britain in one theatre.

It will be seen that there is ample room for the details and critical study of each phase especially in the light of information of what was the policy and intentions of Government from time to time,

Major-General Bird, formerly an instructor at the Staff College, now Lieutenant-Governor of Chelsea Hospital, has long been known as a careful and competent student of war, and had he not lost his leg when commanding his battalion in the very beginning in France would undoubtedly have taken a prominent part in it. The loss of his leg sent him to the machine at the War Office, where his general knowledge of affairs well qualified him to make analytical studies of the less recorded stores of the war.

In a "Chapter of Misfortunes" he has devoted himself to the study of the second phase referred to above, the policy and acts of Townsend's advance, and of Aylmer's long-drawn-out-attempts to relieve him. The story finishes, however, with that great and much criticised disappointment, the battle of the Dujailah, but does not deal with the final attempts that General Gorringe made when the 13th Division had arrived.

This second phase is studied in its natural divisions. Events prior to the battle of Ctesiphon, the battle itself, events subsequent to the battle, events proceeding the battle of the Dujailah, and events subsequent to that battle. The writer has ample information at his disposal and his study is an accurate and critical though sympathetic one.

This attitude of sympathy is one which all critics, at any rate early critics, would be wise to adopt, and those who know how easily they might have done worse themselves, are careful in their allotment of blame. But critical analysis is for the student, and necessary for the future, and General Bird puts his finger on the main points that the Tigris Army so frequently discussed round its camp fires. To some extent General Bird realises the real breaking factor, *viz.*, the failure to organize transportation and communications to give a power of manœuvre comparable with the ambitions of those who planned at the top.

Five-hundred miles of river subject to many vicissitudes of high and low water, a port that was only a river anchorage served by native port lighters, no tugs, no wharves, no cranes, no river pilots, no buoyage, no dry land to make depots on, no port roads, no inland roads, no anything.

To develop a campaign, involving many divisions, hundreds of miles from the sea, where climatic conditions would inevitably produce many sick, before an adequate hinterland had been developed on a system based on knowledge and foresight, was to ask for all the trouble that ensued. For instance the very steamers that took Townsend's supplies and involved themselves in river bends more than twice as long as the marching road of the troops, had to be removed from the service of 350 miles of river behind. Steamers from time to time were sent but no one thought of organizing the base workshops and labour that alone can keep a scrap fleet on the water. No systematic development of the base allowed of the rapid despatch in health and comfort of troops or their adequate cantoning while awaiting passage. Troops dropped half their numbers in sick before they reached the front.

However great the mistakes of policy and of tactics, the spirit of the troops and their commanders would have counteracted them, had it been possible to get them with their resources, together, at the points required.

General Bird constantly points out the muddiness of the strategic conception of governments, the lighthearted entrance on enterprises for which the force was not equipped, and the failure to recognise the fundamental rule that he who wills the end must will the means.

Among the points that are brought out as criticism of instruction are the tendencies of the higher command on the spot to get too much mixed up with the excitement of the battle line, both at Ctesiphon and the Dujailah, and the oft-wondered at arrangement whereby the force to carry out the Dujailah attack was specially constituted at the time under a strange commander and a hastily gathered staff, with all the dangers of ineffective combination and communication that are inevitable in such cases.

The special qualifications of the commander no doubt induced the corps commander to risk the objections. Then the various incidents that led up to the failure to get forward before the Turks came up which were so much criticised in the force, the failure to probe quickly to see if there was opposition, and the surprised

disappointment which this produced both in the force and in the Kut Garrison are detailed and the causes examined, not to gibbet the harassed commanders of the time but to impress on those to come what may help them in future trials.

It is interesting to learn that General Townsend himself, while characteristically offering to defend Kut as he had defended Chitral, had himself proposed the evacuation of Kut before he took down his bridge, and that Sir John Nixon had ordered him to stay there. This clears up a very moot point when we realise that Government by this decision were compelled to develop this subsidiary campaign at immense cost and strain, whereas had the place been evacuated Government could have taken as much or little of the future campaigns as suited them.

Due prominence is given to the fact that General Aylmer, commanding the Tigris Corps, was much hampered in his preparations and consequently compelled to premature advances when inadequately equipped with fighting accessories, because of General Townsend's firm dates of starvation, which a more accurate survey of his resources constantly postponed.

[10] This was the subject of very much comment in the Army.

Again the lesson is for comprehensive and accurate compilation of resources, and a 'Q' staff and a supply service that understands such matters. It is interesting to remember that when the Force evacuated the Lucknow Residency large supplies were left behind collected even before the Siege commenced by Sir Henry Lawrence but unknown to the military command. How this may have, indeed did, result in an unnecessary early advance can be imagined.

General Bird's book is well named "A Chapter of Misfortunes" for never had a commander or troops been so condemned to struggle against so many and varied accidental and unexpected events. Winds that prevented bridging and river movement, rain that turned hard surface into slippery impossibility. Marshes that moved on you in the wind, mirage that obscured all observation, sudden falls of river that left vessels of ammunitions far away and the like. "*Felix qui postuit rerum cognoscere causas.*"

The JOURNAL of the UNITED SERVICE INSTITUTION of INDIA

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All communications shall be addressed to the Secretary, United Service Institution of India, Simla.

Contributions to the Journal.

All papers must be written in a clear, legible hand, and only on one side of the paper. All proper names, countries, towns, rivers, etc., must, when in manuscript be written in capital letters. All plans must have a scale on them.

Contributors are responsible, when they send articles containing any information which they have obtained by virtue of their official positions, that they have complied with the provisions of A.R. I., Vol. II., para. 487, and King's Regulations, para. 453.

Anonymous contributions under a *nom-de-guerre* will not be accepted or acknowledged; all contributions must be sent to the Secretary under the name of the writer and the paper will, if accepted, be published under that name unless a wish is expressed for it to be published under a *nom-de-guerre*. The Executive Committee will decide whether the wish can be complied with.

The Committee reserve to themselves the right of omitting any matter which they consider objectionable. Articles are only accepted on these conditions.

The Committee do not undertake to authorise the publication of such papers as are accepted, in the order in which they may have been received.

Contributors will be supplied with three copies of their paper *gratis*, if published. Manuscripts of original papers sent for publication in the Journal will not be returned to the contributor, unless he expresses a wish to have them back and pays the postage.

MILITARY WIDOWS' FUND, — BRITISH SERVICE —

THIS FUND enables a British Service (Army) officer, by subscribing from Rs. 2 to Rs. 4 monthly, to assure, in the event of his death while on the Indian Establishment, immediate payment:—

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The Fund (late Queen's Military Widows' Fund) was established in 1820, to assist families of British Service (Army) officers dying in India, and mainly to enable them to return Home without delay.

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For admission and rules apply to:—

The Secretary,
MILITARY WIDOWS' FUND,
Army Headquarters, Simla.

United Service Institution of India.

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The General Officer Commanding-in-Chief, Southern Command.
The General Officer Commanding-in-Chief, Eastern Command.
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1. The United Service Institution of India is situated at Simla.
2. Officers wishing to become members of the United Service Institution of India should apply to the Secretary. The rules of membership are printed on the opposite page.

3. The reading-room of the Institution is provided with all the leading newspapers, magazines, and journals of military interest that are published.

4. There is a well stocked library in the Institution, from which members can obtain books on loan free. Suggestions for new books are solicited, and will be submitted to the Committee. Books are sent out to members V. P. for the postage.

5. The Institution publishes a Quarterly Journal in the months of January, April, July and October which is issued postage free to members in India and to all life members but ordinary members wishing to have their journals sent to any address out of India must pay in advance Re. 1 per annum to cover foreign postage charges.

6. Members and the public are invited to contribute articles to the Journal of the Institution for which honoraria will be awarded by the Executive Committee. Rules for the guidance of contributors will be found on the opposite page.

7. Members are responsible that they keep the Secretary carefully posted with regard to changes of address.

8. When on leave in England, members can, under the affiliation rules in force, attend the lectures and make use of the reading-room, etc., of the Royal United Service Institution, Whitehall, on payment of a subscription of 5 shillings per six months.

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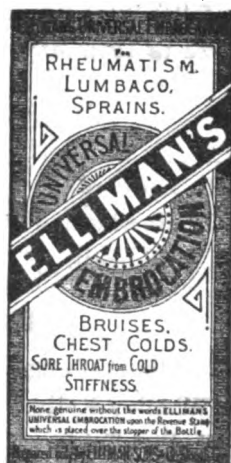
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United Service Institution of India.

JULY, 1923.

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6. The Cavalry Division in the War of the Future by Colonel Freiherr Von Weitershausen. (Translated from the Militär Wochenblatt of 1st January 1923 by "Chalk")	346
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Reviews.

FOREIGN.

The Militär Wochenblatt.

RECENT BOOKS.

- (i) Sir Douglas Haig's Command.
- (ii) The Reformation of War.
- (iii) The Defence of India.

- (iv) The Sepoy Officer's Manual.
- (v) Mashir us Sipah.

SECRETARY'S NOTES.

I.—New Members.

The following new members joined the Institution from 16th March 1923 to 19th May 1923.

Life Members.

Capt. R. B. Ledward.	Major R. T. Holland.
Capt. H. D. Moorhead.	Capt. A. Beckett.
Lieut. W. R. Russell.	Capt. R. A. Stubbings.

Ordinary Members.

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Capt. H. Whalley-Kelly.	Capt. A. C. Curtis.
Col. W. W. Pitt-Taylor.	Capt C. B. Mosse.
Lieut.-Col. H. C. Duncan.	Lieut. L. D. Gleeson.
Capt. L. V. C. Hawkes.	Capt. L. B. Green.
Lieut. E. C. Beard.	Lieut. H. B. Wood.
Capt. M. J. O'Connor.	Capt. O. O. Curtis.
Major-Genl. Sir W. H. Anderson.	Lieut. E. G. Wallace.
Capt. G. R. Clarke.	Major A. F. Cole.
Capt. A. V. Anderson.	Capt. M. C. T. Gompertz.

II.—Examinations.

Books on Military History and Languages with Dictionaries are available in the Library and the following list of books, which is complete in accordance with the War Office List, may be found useful for reference by officers, studying for promotion examinations or entrance to the Staff College.

MILITARY HISTORY (SPECIAL PERIOD).

**1. *The Campaign of the British Army in France and Belgium
up to 20th November, 1914.***

A.—OFFICIAL ACCOUNT.

Sir John French's Despatches.

B.—OTHER BOOKS.

40 days in 1914, by General Maurice (new edition).

The Battle of the Marne, by G. H. Perris.

1914, by Viscount French.

General sketch of the European War, by Belloc.

The Great War, by Colonel Sedgwick.

My memoirs, by Ludendorf.

Falkenhayn's Book.

Von Kluck's Book.

British Campaign in France, Flanders, by Conan Doyle, 1914.

Nelson's History of the War.

Ypres, by German General Staff.

Oxford pamphlets, August 1914. The Coming of the War,
by S. Williamson.

Oxford pamphlets, August 1914, Nos. VII and X.

Times Documentary History of the War, Vol. V, Military,
Part I.

Times Documentary History of the War, Vol. VIII, Part III.

Der Grobe Krieg Schlacht bei Mons.

Der Grobe Krieg Schlacht bei Longwy.

2. *The Palestine Campaign.*

A.—OFFICIAL ACCOUNT.

A brief record of the advance of the Egyptian Expeditionary
Force, 1919.

B.—OTHER BOOKS.

Allenby's Final Triumph, by W. T. Massey.

How Jerusalem was won, by W. T. Massey.

3. *Organisation of Army since 1868.*

A.—ORGANISATION OF ARMY SINCE 1868.

History of British Army, by Fortescue.

Outline of Development of British Army, by Genl. Anderson.

Our Fighting Services.....by Sir Evelyn Wood.

B.—FORCES OF THE EMPIRE.

The Statesman's Year Book.

Army List.

Articles in Newspapers and Magazines, *viz.* R. U. S. I.

Army Quarterly, Journal of the U. S. I. of India, etc.

4. *Development and constitution of the British Empire.*

A.—THE BRITISH EMPIRE.

Encyclopædia Britannica—(contains much concentrated information).

The Statesman's Year Book.

Whitaker's Almanack.

The Colonial Office List.

The British Empire and its History, by E. G. Hawke.

The Government of British Empire, by Jenks, 1918.

The British Empire (6 lectures) by Sir C. P. Lucas, 1918.

The foundation and growth of the British Empire, by J. A. Williamson, 1918.

The beginnings of English Overseas Enterprise, by Sir C. P. Lucas, 1917.

The Government of England, by L. A. Lowell, 1912.

The Expansion of the British Empire, by W. H. Woodward, 1900.

Overseas Britain, by E. F. Knight, 1907.

The origin and growth of the English Colonies and of their system of Government, by H. E. Egerton, 1903.

A short History of Politics, by Jenks, 1900.

The English Constitution, by Bagehot, 1909.

The Expansion of England, by Sir J. Seely, 1883.

Introduction of the study of the law of the Constitution, by A. V. Dicey, 1908.

England in the Seven Years' War, Sir J. Corbett, 1907.

Selected Speeches and Documents on British Colonial Policy, 2 Vols., A. B. Keith, 1918.

B.—BOOKS ON SPECIAL PORTIONS OF THE EMPIRE OR WORLD.

The Rise and Expansion of British Dominions in India, by Sir A. C. Lyall, 1894.

A brief history of the Indian Peoples, by Sir W. H. Hunter, 1907.

The Nearer East, by Hogarth, 1902.

Secretary's Notes.

- Modern Egypt, by Cromer, 1908.
- The History of Canada, by W. L. Grant.
- Nova Scotia, by B. Wilson, 1911.
- Report on British North America, by Sir C. P. Lucas.
- The Union of South Africa, by R. H. Brand, 1909.
- Short History of Australia, by E. Scott.
- History of the Australasian Colonies, by Jenks, 1912.
- The English in the West Indies, by J. A. Froude, 1888.
- The Lost Possessions of England, by W. F. Lord, 1896.

5. Military Geography.

- Naval and Military Geography of the British Empire, by Dr. Vaughan Cornish, 1916.
- Outlines of Military Geography, by Col. A. C. Macdonnell, 1911.
- Introduction of Military Geography, by Col. E. S. May.
- Imperial Defence.....by Col. E. S. May.
- Britain and the British Seas, by H. J. Makinder, 1907.
- Military Geography, by Macguire.
- Imperial Strategy, by Repington.
- War and the Empire, by H. Foster.
- Historical Geography of British Colonies (Dominions), 7 Vols.,
by Sir C. P. Lucas, 1906—17
 - Vol. 1, Mediterranean.
 - Vol. 2, West Indies.
 - Vol. 3, West Africa.
 - Vol. 4, South Africa.
 - Vol. 5, Canada.
 - Vol. 6, Australia.
 - Vol. 7, India.

- The Influence of Sea Power on History, by A. I. Mahan, 1890.
- Historical Geography of the British Empire by Hereford George.

- The Mastery of the Pacific, by A. R. Colquhoun, 1902.
- Frontiers.....by C. B. Fawcett, 1918.

III.—Payment for Articles in the Journals.

Articles accepted for publication in the Journal are paid for, and a sum of approximately Rs. 400 is awarded for articles and reviews published in each Quarterly Journal.

IV.—Contributions to the Journal.

Articles submitted for publication must be typed in *duplicate*. With reference to Army Regulations, India, Volume II, paragraph 487, and King's Regulations, paragraph 453, as amended by Army Order 340 of 1913, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Committee.

2. It has been decided to introduce two new items in the Journal headed—

(i) Criticisms.

(ii) Notes on current Military and Naval questions.

The rules for (i) to be—

That the criticism should be headed with the title of the article criticised, and the date of the Journal in which published.

That criticisms should be signed with a *nom-de-plume*, but that critics must disclose their identity to the Secretary.

The rules for (ii) to be the same as for Articles.

Instructions for the Preparation of Drawings and Plans for Reproduction by Lithography.

These should be in *jet* black. No washes nor ribands of colour should on any account be used.

If it is absolutely necessary to use colour (and these are only permissible in line work or names) the following will reproduce photographically, i.e.:—

Dark red, dark orange, dark green. No other colour should on any account be used.

V.—Library Rules.

1. The Library is only open to members and honorary members of the United Service Institution of India, members are requested to look upon books as not transferable to their friends.

2. No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

3. The United Service Institution of India is open all the year round—including Sundays—from 9 A.M. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

4. A member shall not be allowed, at one time, more than three books or sets of books.

5. Papers, magazines, "Works of reference" or books marked "Not to be taken away," or noted as "Confidential" may not be removed.

6. No particular limit is set as to the number of days for which a member in Simla may keep a book, the Council being desirous of making the library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member it will be re-called.

7. Applications for books from members at out-stations are dealt with as early as possible, and books are despatched per Registered V.-P. P. They must be returned carefully packed per Registered Parcel Post within one month of date of issue, or application made for permission to retain them for a further period. This will always be granted unless the book is required by another member.

8. If a book is not returned at the end of four months, it must be paid for, without the option of return, if so required by the Executive Committee.

9. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

10. The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

11. A list of all books presented and purchased and also a list of books useful to members studying for the Staff College and promotion Examinations will be found, under Secretary's Notes, in the quarterly issue of the U. S. I. Journal. Members are invited to note any books which they think might with advantage be procured for the Institution. The suggestions will be placed before the Secretary.

12. Members are invited to contribute presents of books, maps, and photographs of naval and military interest. These may be addressed to the Secretary, U. S. I. of India, Simla. They will be duly acknowledged.

VI.—Library Catalogue.

Under Revision.

VII.—Gold Medal Prize Essay.**GOLD MEDAL PRIZE ESSAY COMPETITION, 1922-23.**

Essays bearing the undermentioned *nom-de-plumes* have been received at the time of going to Press.

“Oh, East is East, and West is West, and never the twain shall meet.”

VIII.—Army List pages.

The U. S. I. is prepared to supply members and units with manuscript or type-written copies of Indian Army List pages, at the following rates:—

Manuscript, per page, Re. 1.

Type-written, per page, Rs. 2.

IX.—Books.

Books Purchased.

<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
1. Indian Year Book ...	1923	Sir S. Reed.
2. A Course of Lectures to Indian Platoon Commanders ...	1922	Lt.-Col. F. S. Keen.
3. Recent Happenings in Persia ...	1922	J. M. Keynes.
4. The Life and Letters of Walter Page (2 Vols.) ...	1923	B. J. Hendrick.
5. The Revolt Against Civilisation ...	1922	L. Stoddart.
6. My War Experiences ...	N. D.	Crown Prince Wm. of Germany.
7. The Turkish Empire from 1288 to 1914 ...	1923	Lord Eversley and Sir V. Chirol.
8. The War in the Air (Vol. I)	1922	W. Raleigh.
9. Economic Consequences of the Peace ...	1920	J. M. Keynes.
10. Official History of the War (Vol. I) ...	1923	Bg.-Genl. Edmonds.
11. The Reformation of War...	1923	Col. J. F. C. Fuller.
12. Operations of War. (Revised to date by Major-General Sir Aston.) ...	1923	General Sir E. B. Hamley.
13. The World Crisis, 1911—14	1923	S. Winston Churchill.
14. Tanks in the Great War...	1920	Lt.-Col. J. F. C. Fuller.

Secretary's Notes.

<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
15. Precepts and Judgments	1919	Marshal Foch.
16. Military Technical Terms in French ...	1913	M. Deshumbert.
17. The Reconnaissance of Mount Everest ...	1921	Lt.-Col. C. K. Howard- Bury.
18. Popular Stories of Ancient Egypt ...	1915	Sir. G. Maspero.
19. Manual of Egyptian Ar- chæology. ...	1914	Sir. G. Maspero.

Books Presented.

<i>Title.</i>	<i>Published.</i>	<i>Presented by—</i>
1. A Life of Sir Eyre Coote. (Col. H. C. Wyly) ...	1923	The Oxford Univer- sity Press, Bombay
2. * Sepoy Officers Manual. (Barrows) ...	1923	Thacker Spink & Co., Calcutta.
3. Bengal and Agra Annual Guide and Gazetteer, 1841 ...	Vols. 1 to 4 (1841)	The Judge Advocate- General in India.
4. Short History of the Royal Regiment of Artillery...	1923	Messrs. Gale & Pol- den, Aldershot.
5. Historical Record of the 39th Gharwal Rifles (Vol. I), 1887—1922 ...	1923	The Colonel of the Regiment.
6. Staff College Examination Reports, F e b r u a r y - March, 1923 ...	1923	The War Office.
7. Routes in Western Hima- layas, Kashmir, etc. (Major K. Mason) ...	1922	Survey of India, Deh- ra Dun.

Books on Order.

<i>Title.</i>	<i>Author.</i>
1. La Grande Guerre Sur le Front Occidental ...	General Palat.
2. Le Plan de Campagne Francais...	General Laurezac.
3. Le Commandement Unique ...	Mernieux.
4. Revision of the Treaty ...	J. M. Keynes.
5. The Problem of the Pacific in the 20th Century ...	Golovin.
6. Cambridge History of India (Vol. I)	Rapson.
7. When Labour Rules ...	J. H. Thomas.
8. Outline of the Egyptian & Palestine Campaign ...	Manifold (Major-General).

United Service Institution of India.

Prize Essay Gold Medalists.

(With rank of Officers at the date of the Essay).

- 1872..ROBERTS, Lieut.-Col. F. S., V.O., C.B., R.A.
1873..COLQUHOUN, Capt. J. S., R.A.
1874..COLQUHOUN, Capt. J. S., R.A.
1879..ST. JOHN, Maj. O. B. C., R.E.
1880..BARROW, Lieut. E. G., 7th Bengal Infantry.
1882..MASON, Lieut. A. H., R.E.
1883..COLLEN, Maj. E. H. H., S.C.
1884..BARROW, Capt. E. G., 7th Bengal Infantry.
1887..YATE, Lieut. A. C., 27th Baluch Infantry.
1888..MAUDE, Capt. F. N., R.E.
 YOUNG, Maj. G. F., 24th Punjab Infantry (specially awarded
 a silver medal).
1889..DUFF, Capt. B., 9th Bengal Infantry.
1890..MAGUIRE, Capt. C. M., 2nd Cav., Hyderabad Contingent.
1891..CARDEW, Lieut. F. G., 10th Bengal Lancers.
1893..BULLOCK, Maj. G. M., Devonshire Regiment.
1894..CARTER, Capt. F. C., Northumberland Fusiliers.
1895..NEVILLE, Lieut.-Col. J. P. C., 14th Bengal Lancers.
1896..BINGLEY, Capt. A. H., 7th Bengal Infantry.
1897..NAPIER, Capt. G. S. F., Oxfordshire Light Infantry.
1898..MULLALLY, Maj. H., R.E.
 CLAY, Capt. C. H., 43rd Gurkha Rifles (specially awarded a
 silver medal).
1899..NEVILLE, Col. J. P. C., S.C.
1900..THUILLIER, Capt. H. F., R.E.
 LUBBOCK, Capt. G., R.E. (specially awarded a silver medal).
1901..RANKEN, Lieut.-Col. G. P. P., 46th Punjab Infantry.
1902..TURNER, Capt. H. H. F., 2nd Bengal Lancers.
1903..HAMILTON, Maj. W. G., D.S.O., Norfolk Regiment.
 BOND, Capt. R. F. G., R.E. (specially awarded a silver medal).
1904..MACMUNN, Maj. G. F., D.S.O., R.F.A.
1905..COCKERILL, Maj. G. K., Royal Warwickshire Regiment.
1907..WOOD, Maj. E. J. M., 99th Deccan Infantry.
1908..JEUDWINE, Maj. H. S., R.A.
1909..MOLYNEUX, Maj. E. M. J., D.S.O., 12th Cavalry.
 ELSMIE, Maj. A. M. S., 56th Rifles, F. F. (specially awarded
 a silver medal).
1911..MR. D. PETRIE, M. A., Punjab Police.
1912..CARTER, Maj. B. C., The King's Regiment.
1913..THOMSON, Maj. A. G., 58th Vaughan's Rifles (F.F.)
1914..BAINBRIDGE, Lieut.-Col. W. F., D.S.O., 51st Sikhs (F.F.)
 NORMAN, Maj. C. L., M.V.O., Q. V. O., Corps of Guides (specially
 awarded a silver medal).
1915..No Award.
1916..CRUM, Maj. W. F., V. D., Calcutta Light Horse.
1917..BLAKER, Maj. W. F., R.F.A.
1918..GOMPERTZ, Capt. A. V., M. C., R.E.
1919..GOMPERTZ, Capt. M. L. A., 108th Infantry.
1920..KEEN, Lt.-Col. F. S., D.S.O., 2/15 Sikhs.
1921..No Award.
1922..MARTIN, Maj. H. G., D.S.O., O.B.E., R.F.A.

MacGREGOR MEMORIAL MEDALS.

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June :—

(a) For officers—British or Indian—silver medal.

(b) For soldiers—British or Indian—silver medal, with Rs. 100 gratuity.

3. For specially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for special good work.

4. The award of medals is made by His Excellency the Commander-in-Chief as Vice-Patron, and the Council of the United Service Institution who were appointed administrator of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.

Note.

(i) Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

(ii) When the work of the year has either not been of sufficient value or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MacGregor Memorial Medalists.

(With rank of officers at the date of the award).

1889.. BELL, Col. M.S., V.C., R.E. (specially awarded a gold medal).

1890.. YOUNGHUSBAND, Capt. F. E., King's Dragoon Guards.

**N. B.*—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Volunteers and Corps under Local Governments, Frontier Militia Levies and Military Police, also all ranks serving in the Imperial Service Troops.

MacGregor Memorial Medalists.—(contd.)

- 1891.. SAWYER, Major H. A., 45th Sikhs.
RAMZAN KHAN, Havildar, 3rd Sikhs.
- 1892.. VAUGHAN, Capt. H. B., 7th Bengal Infantry.
JAGGAT SINGH, Havildar, 19th Punjab Infantry.
- 1893.. BOWER, Capt. H., 17th Bengal Cavalry, (specially awarded a gold medal).
FAZALDAD KHAN, Dafedar, 17th Bengal Cavalry.
- 1894.. O'SULLIVAN, Major G. H. W., R.E.
MULL SINGH, Sowar, 6th Bengal Cavalry.
- 1895.. DAVIES, Capt. H. R., Oxfordshire Light Infantry.
GANGA DYAL SINGH, Havildar, 2nd Rajputs.
- 1896.. COCKERILL, Lieut. G. K., 28th Punjab Infantry.
GHULAM NABI, Sepoy, Q. O. Corps of Guides.
- 1897.. SWYAYNE, Capt. E. J. E., 16th Rajput Infantry.
SHAHZAD MIR, Dafedar, 11th Bengal Lancers.
- 1898.. WALKER, Capt. H. B., Duke of Cornwall's Light Infantry.
ADAM KHAN, Havildar, Q. O. Corps of Guides.
- 1899.. DOUGLAS, Capt. J. A., 2nd Bengal Lancers.
MIHR DIN, Naik, Bengal Sappers and Miners.
- 1900.. WINGATE, Capt. A. W. S., 14th Bengal Lancers.
GURDIT SINGH, Havildar, 45th Sikhs.
- 1901.. BURTON, Maj. E. B., 17th Bengal Lancers.
SUNDAR SINGH, Colour Havildar, 31st Burma Infantry.
- 1902.. RAY, Capt. M. R. E., 7th Rajput Infantry.
TILBIR BHANDARI, Havildar, 9th Gurkha Rifles.
- 1903.. MANIFOLD, Lieut.-Col. C. C., I.M.S.
GHULAM HUSSAIN, Lance-Dafedar, Q. O. Corps of Guides.
- 1904.. FRASER, Capt. L. D., R.G.A.
MOGHAL BAZ, Dafedar, Q. O. Corps of Guides.
- 1905.. BENNICK, Maj. F., 40th Pathans (specially awarded gold medal).
MADHO RAM, Havildar, 8th Gurkha Rifles.
- 1906.. SHAHZADA AHMAD MIR, Risaldar, 36th Jacob's Horse.
GHAFUR SHAH, Lance-Naik, Q. O. Corps of Guides Infantry.
- 1907.. NANGLE, Capt. M. C., 92nd Punjabis.
SHEIKH USMAN, Havildar, 103rd Mahratta Light Infantry.
- 1908.. GIBBON, Capt. C. M., Royal Irish Fusiliers.
MALANG, Havildar, 56th Punjab Rifles.
- 1909.. MUHAMMAD RAZA, Havildar, 106th Pioneers.

MacGregor Memorial Medalists—(contd.).

- 1910.. SYKES, Maj. P. M., C.M.G., late 2nd Dragoon Guards (specially awarded a gold medal).
 TURNER, Capt. F. G., R.E.
 KHAN BAHADUR SHER JUNG, Survey of India.
- 1911.. LEACHMAN, Capt. G. E., The Royal Sussex Regiment.
 GURMUKH SINGH, Jemadar, 93rd Burma Infantry.
- 1912.. PRITCHARD, Capt. B.E.A., 83rd Wallahjabad Light Infantry (specially awarded a gold medal).
 WILSON, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
 MOHIBULLA, Lance-Dafedar, Q. V. O. Corps of Guides.
- 1913.. ABBAY, Capt. B. N., 27th Light Cavalry.
 SIRDAR KHAN, Sowar, 39th (K.G.O.) Central India Horse.
 WARATONG, Havildar, Burma Military Police (specially awarded a silver medal).
- 1914.. BAILEY, Capt. F. M., I.A. (Political Dept.).
 MORSHEAD, Capt. H. T., R.E.
 HAIDAR ALI, Naik, 106th Hazara Pioneers.
- 1915.. WATERFIELD, Capt. F. C., 45th Battray's Sikhs.
 ALI JUMA, Havildar, 106th Hazara Pioneers.
- 1916.. ABDUR RAHMAN, Naik, 21st Punjabis.
 ZARGHUN SHAH, Havildar, 58th Rifles (F.F.) (Specially awarded a silver medal).
- 1917.. MIAN AFRAZ GUL, Sepoy, Khyber Rifles.
- 1918.. NOEL, Capt. E. W. C. (Political Department.)
- 1919.. KEELING, Lt.-Col. E. H., M.C., R.E.
 ALLA SA, Jemadar, N.-E. Frontier Corps.
- 1920.. BLACKBIE, Capt. L. V. S., Q. V. O. Corps of Guides.
 AWAL NUR, C. Qm. Havildar, 2nd Bn., Q. V. O. Corps of Guides (Special gratuity of Rs. 200.)
- 1921.. HOLT, Major A. L., Royal Engineers.
 SHER ALI, Sepoy No. 4952, 106th Hazara Pioneers.
- 1922.. ABDUL SAMAD SHAH, Capt., O.B.E., 31st D. C. O. Lancers.
 NUR MUHAMMAD, Lance-Naik, 1st Guides Infantry, F. F.

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EDITORIAL.

THE POSITION IN THE RUHR.

The international situation caused by the invasion of the Ruhr, though still highly critical, has somewhat improved. *The ballon d'essai* flown by the Germans in the shape of an obviously inadequate monetary offer has probably served its purpose. It has indicated that though the Entente may have lost some of its pristine strength there is still remarkable unanimity among the Allies on many of the main questions. It will probably be followed now by a proposal which, without meeting the extreme demands of France, may yet furnish a basis for discussion on which a satisfactory compromise may ultimately be built.

The position of the British Government throughout the affair has been one of the utmost difficulty. It fully sympathises with the desire of the French to secure themselves against future invasions and to obtain an indemnity for the restoration of their ravaged country. Yet it has to consider the economic peril of continued war in Europe particularly in view of the unemployment at home, the danger of the complete financial collapse of Germany and the

possibility of reviving Bolshevism within Teuton borders. It would indeed be an easy task to govern if great questions of policy could be solved like a mathematical problem or if there were in them clearly defined divisions between right and wrong such as would appear to be the case from the diatribes of the protagonists of particular views. Such however is seldom the case. There is rarely a wholly satisfactory key to complex political problems, and no one realises the weaknesses of the eventual solution more than the statesman on whom lies the unenviable responsibility of giving the decision.

THE GREAT ILLUSION.

Some years before the war Mr. Norman Angell published a book called "The Great Illusion" which raised storms of protest in military and other conservative circles. He was credited with the intention of sowing belief that wars were at an end or could be abolished as easily as Englishmen have abolished the duel, and therefore that all nations might lightly proceed to disarm. That however was not his argument. He was indeed a pacifist, and the general object with which he wrote was to avert war. But the Great Illusion to which he refers was not that wars were inevitable but that they could be made to pay. He pointed out the highly organised nature of modern civilisation, the sensitiveness of the international credit system and the increasing interdependence of peoples for the requirements of existence or of luxury. He showed that after 1871 the Germans had suffered almost as heavily in receiving the indemnity as the Frenchman in paying it, partly because the indemnity, being paid mainly in kind, had interfered with normal trade, and partly because the former had for a space given way to extravagance, whereas the latter had been driven to thrift. He suggested that future wars would see the same phenomenon repeated and that the victor would again suffer heavily. He hoped by his warnings to turn the militant of all nations from warlike designs.

His book was widely read but proved wholly ineffective. Of all the Great Powers Eng'and alone harboured no designs of encroachment or revenge; the others were intent upon present or future objectives. The readiest among them struck and the whole world formed the theatre for the ensuing struggle. The attack failed and the defenders dictated the terms; but victor and vanquished are alike involved in the vast calamity that banished the "slow-born gain" of the ages from the life of nations. Honour indeed is satisfied; there is the pride of great achievement. But who shall say that England or any other European country is a better or happier place than in 1914. Norman Angell was right: the belief that war can be a paying proposition is indeed a great illusion.

THE WAR TO END WAR.

As therefore the bubble is pricked and the illusion can no longer exist in the mind of any sane man; and as the cause of offensive war is generally the desire of gain whether it be the acquisition of territory or of trade, the conversion of infidels or the satisfaction of revenge, it might be supposed that nations would cease from warring. At least with devastation on their hearths, such a course might be expected of the present generation. Yet, what are the facts? Europe and Asia are armed camps. Since the war to end wars there have been wars and ceaseless threats of war. The greatest object-lesson of all time has failed, and it is clear that, innate in the heart of man, stronger in its crises than self-interest, domestic affection or the love of peace, is an ardent militant spirit that arguments cannot conquer nor suffering quell. War in fact is still as inevitable as peace in the acts of human intercourse.

THE MITIGATION OF WARFARE.

The horrors and the ravages of war have not however been forgotten, and there is a strong desire to mitigate them, which found expression at the Washington conference in the abolition of gas and the regulation of submarine warfare, and elsewhere in suggestions for bringing campaigns to rapid conclusions. There is an impression

abroad that action in the great war was unnecessarily brutal, unnecessarily prolonged and often offensive to recognised canons. Can it be curtailed, made more human and more correct in form?

THE REFORMATION OF WAR.

Answers to these questions may be found in Colonel Fuller's "Reformation of War." The talented author of that valuable contribution to prophetic literature would combine the qualities of brevity and humanity in a sudden and soul-shaking shock to the moral of the opposing nation, striking his blow not at the covering army, but at the people themselves, in whom the ultimate power of resistance lies. He realises that the onset may entail the killing of civilians, male and female, even of children but he regards such casualties as inevitable in any case in war from bombing, bombardment and starvation. The means to the end—tanks, aeroplanes, chemical warfare—are described at length in the book. As to correctness of form he would leave methods untrammelled by legal restrictions. He would adopt the means best suited to the rapid enforcement of the nation's will upon that of its opponents. In a short and successful campaign the claims of humanity would be best satisfied and the minimum of harm wrought to the belligerents and to the world at large.

If we accept Colonel Fuller's premises of the need for brevity of action and humanity we shall probably do well to accept his main instrument—gas. It is by gas conveyed in tanks and aeroplanes that he destroys the nerve of nations. His figures prove that gas incapacitates but rarely kills; that it effects but little destruction; whereas projectiles of the human order—high explosives and shrapnel—occasion greater devastation and, though they cause relatively fewer casualties cause a much higher percentage of deaths.

MODERN TENDENCIES.

Military opinion as expressed in recent books and articles has a strong bias towards moving warfare; but though there is general agreement in the principle there is still an

immense difference between the conservatives and the advanced thinkers as to degree. The former visualise war as they saw it in the autumn of 1918—a series of weekly bounds, vast numbers, vast expenditure of ammunition, vast trains of transport and, if of Eastern experience, great cavalry movements. The latter see a resistless rush of planes and tanks to a capital objective which is reduced to abject and instant submission by an inundation of gas. One is the muscular, and the other the mechanical school.

Petrol will certainly oust muscle in the long run but the process will be slow and gradual. In the meantime we must deal with actual facts and must therefore :—

- (a) Make the best of the existing situation where petrol and muscle furnish the motive power, but where the latter predominates.
- (b) By means of research and experiment, organised not as a side issue, but as the principal provision for national security, prepare for the war of the future. In such a task, prophets such as Colonel Fuller who possess imagination harnessed to common sense will be of great assistance.

The first of these tasks lies wholly in the province of the soldier, the second in the business of the scientist under the direction of the General Staff.

A MINISTRY OF DEFENCE.

The need of a Ministry of Defence is nowhere more apparent than in the necessity for reconciling and utilising the opinions, and enthusiasms of extremists. The latter from their stalls in the market-place must proclaim loudly the value of their wares if they are to attract and hold the passer-by. They are thus drawn into extravagance of expression which may shock the conservative mind and set in motion counteracting forces. Colonel Fuller allows, for instance, that he has been forced into exaggerations

in order to gain an audience. Squadron Leader Walser* does not hesitate to state that "The factor most likely to exercise an influence on the art of war is undoubtedly the birth of military aviation." There is some truth in his statement but he must know that England was beaten almost to her knees by the submarine campaign and that the Germans consider tanks to have been the main cause of their defeat. A great co ordinating body will ensure that these matters be viewed in their proper perspective and will yet contrive to feed the faith of visionaries.

The committee examining the question of the institution of a Ministry of Defence must be culling much assistance from current military literature for seldom a book or magazine appears without considerable reference thereto. From notices in the press, it would appear probable, the first step to be taken towards the co-ordination of the services will be the establishment of a combined staff college: by general consent, a necessary institution whatever form the means of co-ordination may ultimately take. Should the plan materialise it will be interesting to see whether instruction will be devoted solely to leadership and general staff problems or whether administration will be included in the curriculum. In the latter case, courses would probably be of undue length and an amount of technical detail would have to be crammed beyond the normal power of conscious retention.

AMALGAMATION.

There are strong rumours of the approaching amalgamation of the mounted and dismounted branches of the Royal Artillery. The situation which led to the division of the Regiment some 24 years ago has now wholly changed. Then, the coast defence companies were approximately equal in number to the horse and field batteries and between them pure gunnery furnished the only connecting link. Now coast defence companies have almost disappeared and the bulk of the R.G.A. consists of pack and medium batteries whose work closely resembles that of the mounted branch not only in gunnery but also in drill and manœuvre

* Nineteenth Century April 1923.

Amalgamations of a much more comprehensive nature will however have to be considered in the future. There seems to be some possibility that the army will become a composite service like the navy. On the day when the tank becomes the principle vehicle, the distinctions between cavalry, artillery, infantry and tank corps will disappear.

COMMITTEE OF RETRENCHMENT.

The most crying need of the army in India at present is rest and recuperation; not indeed on account of the strain of war but because of the operations of various axes—post bellum reductions, Geddes reductions, Inchcape reductions. A settled and continuous policy, security of tenure of appointments, power to gauge future prospects approximately, are factors tending strongly towards efficiency and contentment. It would be idle to criticise the reports of the committees mentioned, which doubtless executed their thankless and difficult tasks with industry and ability; but it may be apposite to suggest to Governments that the land now have rest from such operations for at least a decade.

THE BATTLE OF WADI, 13th JANUARY 1916.

By Major-General W. D. Bird, C.B., C.M.G., D.S.O.

(This narrative is a sequel to the account of the battle of Shaikh Saad, published in this Journal in January 1923. It is based on the War Diaries, to which I was most kindly permitted to have access. I was also able to consult "My Campaign in Mesopotamia," by Major-General Sir Charles Townshend.)

During the battle of Shaikh Saad (6th—9th January 1916), a not inconsiderable telegraphic correspondence had been carried on between Generals Nixon, Aylmer and Townshend; and on the 10th January, Townshend, who meanwhile had received news of the enemy's withdrawal from Shaikh Saad, sent a message to Aylmer from Kut-al-Amarah to the effect that, in his opinion, the enemy had moved down-river in order to cover the arrival of reinforcements from the north. It was rumoured, he continued, that an additional Turkish division was due to arrive at the front on the 20th January, and it was a fact that all the latest arrivals had come up before the dates on which they were expected by our service of intelligence. The telegram was concluded with the words, "I think our troubles quite sufficient without more Turks on our backs."

The general situation at this date (10th January) was, from the British point of view, as follows. The information at the disposal of the staff of General Aylmer led them to the conclusion that the Turkish army in Mesopotamia comprised the 13th and 18th Corps, under the command of Nur-ud-din Pasha. The 13th Corps consisted of the 35th Division, which was composed of an amalgamation of the 35th and 38th Arab Divisions, officered by

Turks, and the 52nd, an Anatolian Division, commanded by Ali Najib Bey; the 18th Corps was made up of the 45th, a Turko-Arab Division, and the 51st, an Anatolian Division, and this corps was under Khalil Pasha. It was also reported that four divisions were on the way from Aleppo to Mesopotamia, one of which was expected in a fortnight. In addition it was possible that the 36th Division had moved to Khanikin for the purpose of opposing the Russian troops who were advancing on Baghdad through Persia; and there were rumours that another army corps was destined to undertake the invasion of Persia by the difficult route leading eastwards from Rowanduz. In the area extending from Baghdad to Khanikin and thence southwards of Baghdad the Turks could perhaps dispose of about 30,000 to 34,000 fighting men with 60 guns and apparently 4 aeroplanes; but in a month this force might amount to 60,000. On the other hand it was in favour of the British that the balance of victory had, so far, inclined against the Turks, whose *moral* should therefore be lower than that of our men.

The Russians had sent a force of about 15,000, half of whom were mounted, with 46 guns, from the Caucasus into Persia with the object of co-operating with the British against the Turks, and these troops were advancing in several columns on Karmanshah, Tehran, Ispahan and Kazvin; but the roads were in a bad state, and even Karmanshah was 220 miles from Baghdad, the others being twice this distance from it. Sir John Nixon had, however, established direct communication by wireless through Kazvin with the General Headquarters of the Army of the Caucasus, so that more effective measures than heretofore could now perhaps be taken to secure co-operation between the two armies. (Map 1.)

On the British side General Aylmer, who was commanding the force which was advancing up the Tigris with the object of effecting the relief of the garrison of Kut-al-Amarah, could dispose only of about 10,000 rifles, 1,500 sabres, and 46 guns on

land, including the 61st Howitzer Battery, which had now reached the front, and the troops that had been left behind to clear the battlefield of Shaikh Saad, and one aeroplane fit to fly. In addition the men had fought in a doubtful battle under conditions which were novel to the large majority of them. Five battalions were on the way up the Tigris by steamer to join him, five more were at Basrah or on the march up the river, and two battalions as well as 42 guns and a regiment of Indian cavalry were on the voyage to Basrah. General Townshend could still muster 8,500 fighting men, but, owing to the tactical disadvantages of the position at Kut-al-Amarah, it was probable that a smaller and not a larger number than the garrison would be required to invest the place. (Map 2.)

For the moment, then, the numbers actually available for the attack, defence or relief of Kut-al-Amarah were, it appeared almost equal. But unless the Russians could quickly prosecute their advance through Persia, and, the winter season, bad roads, and mountainous country were all against this, the balance would soon definitely incline in favour of the Turks. Further, it was understood that rations for the garrison of Kut-al-Amarah were available only until the end of January; and the rain storms which occur at this season of the year, and render movement over the plain very difficult by converting it into a slough of sticky, clinging mud, were now imminent. Even if Townshend could hold out so long, the floods caused in the rivers by the melting of the snows in the highlands of Armenia and Persia, would, in March at latest, make it impossible for troops to advance from Basrah up the route leading along the bank of the Tigris. In the flood season movement near the river would, moreover, even in favourable localities, probably be curtailed both in the neighbourhood of Kut-al-Amarah and above it; and if the dykes controlling the canals above Baghdad were cut, large areas would be inundated, and movement might be rendered impracticable in many places.

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Time, as is usual in war, was therefore again a decisive factor, and the British had again to decide whether to endeavour to gain time by continuing the operations, rather than to await the arrival of reinforcements. The principle points now for consideration were whether the supplies possessed by the garrison of Kut-al-Amarah were sufficient to enable it to hold out if the relief were postponed; and if so, whether it would now be judicious for the British to pause, complete the organisation of their force, and bring up reinforcements; the obvious disadvantage of delay being that the enemy would be given the opportunity both of strengthening their positions at Hannah and elsewhere, and also of hurrying forward troops with whom either to overwhelm Townshend or to oppose the relieving army.

In the article dealing with the battle of Shaikh Saad the opinion has been hazarded that, in principle, the farther that the battles for the possession of Kut-al-Amarah were fought from this place, the more advantageous would it be for the British. It is suggested, therefore, that unless reports were received from Townshend that the garrison was in danger of starvation, or that the place was likely to fall to an assault, General Aylmer should have made a pause in his advance and, while gathering reinforcements, should have tried to induce the Turks again to advance to meet him. The British leaders, as will be seen, however, took the opposite view, and they decided that time would best be gained by continuing the operations.

On the 11th January, General Aylmer telegraphed at 1 P.M. to Sir John Nixon a full statement in regard to the situation as follows: "I have been forced to remain here to await the 2nd Rajputs and 61st Howitzer Battery, which have just arrived, and to evacuate as many sick and wounded as possible in their ships. I advance to-morrow morning to the Umm-al-Hannah bend with General Kemball's (28th) Brigade, one field battery, the 23rd Mountain Battery, and the 33rd Cavalry on the

right bank, and the remainder on the left. I have established a post here on the right bank with a garrison of one wing of the 2nd Rajputs, a few cavalry, and a gunboat. The sick and wounded who cannot be evacuated before we leave will remain here. After consulting Generals Younghusband (commanding 7th Division) and Kemball, I determined to continue the advance on Kut; but it is my distinct duty to point out that it is a most precarious undertaking, for which I of course accept full responsibility, as I consider that the situation demands a supreme effort to relieve Townshend. The Army Commander has full figures of the enemy's strength, and possibly 4,000 may be allowed for his losses and desertions at Shaikh Saad. My fighting strength amounts to about 10,000. The enemy is reported by local inhabitants as occupying a position in advance of Es Sinn at the narrowest part between the Suwadah and Suwaikiyah marshes. (Map. 2.) This will probably be continued with an advanced line from near Clery's post to the river. My medical establishments, as you may calculate, are deplorably low and the wounded cannot receive proper attention. Even if it is necessary to remove fighting men from the ships more must be sent up at once. I have only one aeroplane in action. On the other hand I have the greatest confidence that the troops will do what is humanly possible—and I know that the enemy's Arab troops are much demoralised."

That General Aylmer should have warned his superior of the great difficulty of the situation was no more than his duty, and there are few commanders who would not have taken an equally serious view of the situation. Success in war, however, is often gained by the achievement of the apparently impossible when this has become indispensable, and when an opening is given by the enemy without which victory could not have been attained. Some such hope may have inspired the reply of General Nixon, who necessarily was not a prey to the anxieties that were oppressing General Aylmer, and was, in consequence, likely to adopt a more sanguine outlook. Telegraphing at 5-30 P.M. from Basrah he

observed: "I must leave matter to your decision. Am confident you and fine troops under your command will achieve your object. Nixon then stated that four battalions would shortly reach the front, and four more could quickly be sent up-river if Alymer could spare the bulk of the shipping then with his force for their transportation. He added: "Meanwhile, however, the enemy will be strengthening his positions. You are as well informed as I am as regards the enemy's possible reinforcements."

As it happened the immediate difficulty was settled not by General Alymer, but by the Turks; who, either to gain time, or because of the absence of pursuit, or under political pressure from Constantinople, or perhaps because there was a change in the high command (Khalil Pasha having replaced Nur-ud-din), suddenly turned about and began to entrench along the line of the Wadi (Map 3.) General Aylmer was in consequence able to telegraph at 10 p.m., both to General Headquarters and to Kut-al-Amarah that: "The Turks have returned and are entrenching a line on both banks, namely, up the Wadi river and on the right bank of the Tigris opposite. Aeroplane reconnaissance reports their strength as approximately 11,000, nearly all on the left bank. This probably represents the remains of the 52nd and combined 35th and 38th Divisions (all of which had apparently fought at the battle of Shaikh Saad), and cavalry. I am to-night taking up an entrenched position on the left bank in front of this, as if my intention were to remain here. To-morrow night I shall move well north with one division and cavalry brigade and attack his left flank at dawn, holding him in front with the remainder of my force. This has vastly increased our probability of success—and I hope to give him a good beating. Es Sinn was clear of troops at noon and only 300 seen at Abu Rumman." Next day information was sent to Nixon that none of the shipping with Alymer's force could be sent down river so as to facilitate the despatch of reinforcements, for if the British were successful in the coming battle, a rapid advance to Kut-al-Amarah would be made with the whole of the vessels.

The action of the Turks had certainly afforded to the British a better opportunity of gaining success than would have been the case had they followed what seems to have been their original intention of holding the defile between the Suwaikiyah marsh and the Tigris, which is less than a mile across, and where the enemy would have been within more easy reach both of Kut-al-Amarah and their bridge at the Shumran bend a few miles above the town. Whereas now there was greater scope for manœuvre in which the British troops held the advantage over the Turks.

The military problem that had been given to General Aylmer was in essence how to bring about a junction between the two British forces, his own and the garrison of Kut-al-Amarah, while at the same time keeping free communication with his base at Basrah. This could be effected either by means of manœuvre combined with fighting, or by the more direct method of defeating the enemy's army.

The distance from Shaikh Saad to Kut-al-Amarah via Imam Ali Mansur, on the right bank of the Tigris is between 25 and 30 miles, and it was open to General Aylmer to fling scruples to the winds and to march straight to the right bank of the Tigris opposite to Kut. He must then rely on General Townshend to provide rations for the troops, using all the land transport with the Tigris Corps for the carriage of ammunition and water, and trusting that the Turks would be too much concerned for the safety of their own communications as to which Orientals are generally somewhat sensitive, to meddle seriously with those of the British. With favourable weather and a well organised force such a venture might have met with success. But, in view of the climatic conditions when, in consequence of heavy rain the troops might at any moment be rendered almost immobile, and of the improvised transport that alone was available, this alternative may be ruled out. There remained a project similar to that which had been proposed by General Younghusband at the battle of Shaikh Saad, of gaining a

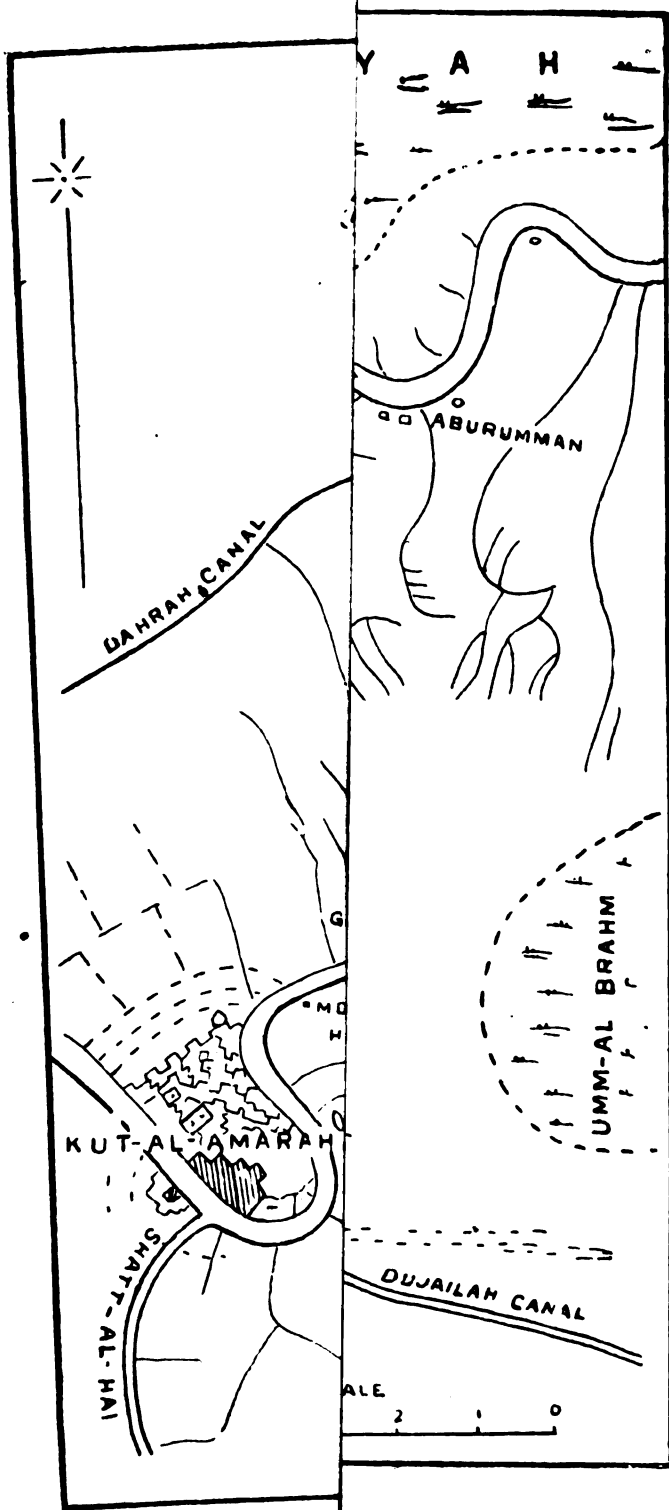
position on the right bank of the Tigris from which to enfilade the inner flank of the Turkish lines on the left bank, and then attacking these directly. Or there was the plan which was actually adopted, or a variation of it; and in favour of some such design was the fact that the enemy had shown little or no enterprise at the battle of Shaikh Saad, and would probably, therefore, act again in the same passive manner. Aylmer, in consequence, would be fully justified in taking liberties with his opponents. Further, it is generally supposed that the Turks, when outmanœuvred, do not quickly adjust their minds to the new conditions in which they are placed and if then hard pressed they rarely recover their mental balance. Since the Wadi at the enemy's left flank is, however, only about two and a half miles from the Suwaikiyah marsh, it is also evident that an important victory was not likely to be gained unless the Turks were first surprised and the operations of the British were then carried out with the utmost vigour. Otherwise the Turks would probably be able at least to gain the Hannah-Sannaifat defile in safety.

General Aylmer doubtless felt that he could not commit his somewhat raw force to an advance and attack on the night of the 11/12th January, before the Turks had gained time in which to consolidate their position. In accordance with his intention of misleading the enemy he sent orders, therefore, on the evening of the 11th to General Kemball, whose troops (the 28th Infantry Brigade, 28th Field Battery, two sections 23rd Mountain Battery and 33rd Cavalry) were still on the right bank of the Tigris at Shaikh Saad to carry out a feint on the 12th January. Under these orders two battalions, a battery and a squadron were to be despatched up-stream on the 12th, and were then ostentatiously to entrench themselves opposite to Naasah. The rest of the group were to remain in camp, and the whole would be required to cross to the left bank of the river on the 12th by the bridge which had been made by the Bridging Train close to Shaik Saad,

Orders were also forwarded to General Younghusband in which he was informed that the Turks were holding the line of the Wadi in strength, and that the force would therefore occupy forthwith a position in readiness, preparatory to further operations which would be undertaken according to circumstances. The troops of the 7th Division consequently moved from their bivouacks on the left bank of the Tigris at about 7 P.M., and the 21st and 19th Infantry Brigades, in this order from right to left, threw up about two miles of entrenchments to the north-east of Naasah, with the 19th and 20th Field Batteries in support. At the same time the 35th Infantry Brigade, with the 1/1st Sussex Field Battery in support, made a mile of trenches in a locality about two and a half miles to the north of Shaikh Saad and at the same distance from the 21st Brigade. The 9th Infantry Brigade, the bulk of which had come up from the battle-field of the 6th—9th January from Musandak, and now consisted of the 1/4th Hampshire (less one company), the 2nd Rajputs (less two companies), the 62nd Punjabis and the 107th Pioneers (less one company); the Cavalry Brigade, the Heavy Artillery, and the 61st Howitzer Battery, were posted on the left bank of the Tigris to the west of Shaikh Saad. This place was held by two companies of the 2nd Rajputs, a squadron of the 33rd Cavalry, and the bulk of the Provisional Battalion; the bridge of boats was secured by two companies of the 128th Pioneers and the 13th Sappers and Miners; 100 men of the Provisional Battalion guarded the shipping: and two companies the 128th, one company of the 107th, and 130 men of the Provisional Battalion remained, with one gun-boat, on the battle-field of the 6th—9th January for the purpose of safeguarding the wounded. (Order of Battle is given at the end of the Article.)

The 12th January was spent in reconnaissance and other preparations for the coming battle. The majority of the tributaries of the Tigris draw water from the river, But the Wadi, behind

Map No. 2.



which the Turks had placed themselves, was a running stream that flows into it, and probably, therefore, could not be controlled by the enemy in the same manner as an irrigation channel into which water could be let, or from which it could be excluded by breaking or building up a dam across its mouth. It was, so far as the British were aware, at the moment fordable, and flowing between steep banks, but was liable to be flooded by rain fall in the Pusht-i-Kuh mountains. Except for the presence of the Wadi, of a walled enclosure known as Chitab's fort, some ruins of villages, and one or more huts of mud which were inhabited by Arabs, the battle-field was not different in character from that of Shaik Saad. The dead, dun-coloured, monotonous level presented an unbroken horizon on every side. The area abounded in small banks and shallow irrigation channels, which would either afford ready-made cover against shells and bullets, or would render the concealment of trenches and their parapets an easy matter. Near the Tigris and Wadi there were also deeper canals, still dry since the river had not risen sufficiently to bring water into them, and therefore providing well-covered ways. In many places too there was low scrub which would favour the concealment both of defences and personnel. The troops had however, now gained some experience of these conditions, and also of the disconcerting effect of the daily haze of fine dust blown up from the desert, and the deceptive mirage.

The reports made by our airmen on the 12th showed that the Turks definitely intended to stand and were busy entrenching, especially on their left where a redoubt was being made at a distance of about two and a half miles from the Tigris. There were emplacements for four or six guns near the Turkish left, and for six more in or near the angle between the Wadi and Tigris; various camps had sprung up behind the Wadi, and it was estimated that 7,500 infantry and 1,200 mounted men had been seen by the airmen. There was also what appeared to be an advanced position

on either side of Chitab's fort and at a distance of from 2,500—3,500 yards from our entrenchments. On the right bank of the Tigris there were a few trenches and a couple of gun-pits, but not more than 500 men. The British cavalry, who had gone out to cover the movements of two officers of the staff detailed both to reconnoitre the ground which was to be crossed in the night march round the enemy's left, and to check the not too accurate sketch maps that had been compiled from the information provided by the airmen, had been fired on by Arabs from a large village lying seven and a half miles to the north-west of Shaikh Saad, but they had, in retaliation, killed 5 of the enemy and captured 30 prisoners.

Towards evening Kemball had recalled the detachment which had been sent up-stream to make the demonstration, and had begun to pass his brigade over the river. Younghusband also commenced the concentration of his division, to which the 63rd Punjabis had been sent during the day. The British received, in addition, a welcome reinforcement, for the 1/9th Gurkhas came up by steamer, and were attached to the 7th Division. The arrival of this unit, and that of some drafts, raised the strength of the infantry to about 11,000 or 11,500 men; and the 93rd Burma Infantry also reached Shaikh Saad on the 13th January while the battle was in progress.

The orders that had been circulated by General Aylmer were in summary, as follows. After explaining that the enemy's troops were still in the position which they had held on the 11th, he stated that it was his intention to deliver an attack at dawn on the 13th, turning the enemy's left or northern flank with a maximum force, while the front would be engaged by a minimum force. To this end the 7th Division, with the field and mountain batteries, was to march after dark to a position of assembly at a point three miles to the east of the ruins lying seven and a half miles to the north-northwest of Shaikh Saad. The Cavalry Brigade was to follow the Division and remain with it until the morning of the 13th. The 28th Infantry Brigade was to relieve the 19th and 21st

Brigades before darkness had fallen on the 12th, and during the night was to move two and a half miles further forward towards the right of the Turkish line. The Corps Artillery, consisting of the 72nd and 77th four-gun 5 inch Howitzer Batteries, two guns of the 104th 4 inch Heavy Battery and the 61st six-gun 4.5 inch Howitzer Battery, would entrench in positions that had already been selected for them behind the 28th Brigade. At 6-30 A.M. on the 13th (the sun would rise at about 7 A.M.), the 7th Division was to advance in echelon of brigades from the left, marching due west, and was to envelop the enemy's left by means of a wide turning movement in which the cavalry were to co-operate moving on the outer flank of the division. The function of the 28th Brigade would be to hold the enemy to their positions which would be bombarded by the Corps Artillery. The gun-boats and their mine-sweepers were to pass through the bridge at 6-30 A.M., and were to co-operate in the attack, and their left would be protected by a small column, consisting of two companies of the 2nd Rajputs from the post at Shaikh Saad, and one squadron of the 33rd Cavalry, which was to move up the right bank of the Tigris. The weak 9th Infantry Brigade would constitute the general reserve, and would be on the left bank to the west of Shaikh Saad, and bridge-heads would be prepared by the 13th Sappers and Miners. Only first line transport was to move with the fighting troops, but the second line transport was to be ready to march when required. Cooked rations for two days were to be carried by the men, and one additional cooked ration was to be placed in the second line transport. As the water in the Wadi was said to be brackish, arrangements must be made for the despatch of drinking water to the 7th Division. Corps headquarters would be in the river steamer *Medjidieh*." (Map 3).

Under these orders, then, the outflanking movement was to be confided to a body of some fourteen and a half battalions, including two companies of the 128th Pioneers, five regiments of

Cavalry, and 30 guns, or perhaps 10,000 fighting men; while the direct attack was to be made by four battalions with 16 guns on land and those in the warships, or 2,500 fighting men on land; but the primary function of the heavy guns was apparently to assist the advance of the outflanking forces. A group equal to about two battalions was to be in reserve, and two more battalions approximately were to be employed in miscellaneous duties.

There are of course points in all orders and arrangements that are open to criticism, and in this case it may be objected that, even if it is admitted that the enemy's troops had shown but little enterprise at the battle of Shaikh Saad, and that such Arab units as were in the enemy's army were not of good quality, the detachment to which was entrusted the duty of holding fast the Turkish main body was somewhat weak adequately to fulfil its functions. It is a well known maxim that, for the attainment of success, concentration of force must be made at the decisive point; but concentration is a relative term, and it implies the greatest force that can be devoted to a given purpose without prejudice to other essential obligations; and the art of war lies largely in the most effective allotment of the troops that are available as between various requirements. Another weakness inherent in a plan of this nature is that close co-operation is seldom attained in such extensively combined operations, and the enemy, therefore, can either avoid the blow, or deal with the divided forces in detail. Some risk or disadvantage, however, attends on every plan of operations. The more elaborate depend for success on the exact performance of several different movements, the more direct tend to resolve themselves into bludgeon work, and important results are then seldom attained. It is plainly most difficult to strike the happy mean, and whatever the plan, victory in every case is due rather to skill in executing than in projecting an operation.

In this connection it may also be pointed out that General Aylmer's position was probably too far from the bulk of his corps, and from the chosen area of decisive operations. It is doubtless right for the commander-in-chief of a large army to be well in rear during battle, and beyond the reach of distraction by local events; but this maxim cannot be applied to small forces and especially when, as was now apparently the case, means of rapid communication are wanting owing to the hurried improvisation of a Signal Service. It is suggested, therefore, that General Aylmer should have placed his headquarters on the right flank where the decision was to be made. On board the "Medjidieh" he was not in a position to be able to influence the operations of the outflanking column; and he could, in fact, only use his slender reserve to assist the remainder of the force in holding the enemy to their entrenchments, or in meeting a counter-attack which was not to be expected unless the operations against the Turkish left met with misfortune. As so important an operation was, however, confided to General Younghusband, it was surely superfluous to lay down the formation to be adopted when advancing from the position of assembly.

In pursuance of the plan of the commander of the Tigris Corps, Sir George Younghusband began, as has been stated, to withdraw his artillery during daylight to the rendezvous at the position occupied by the 35th Infantry Brigade, for the very broken ground near the river would render movement after nightfall a matter of great difficulty; but the guns were first sent towards Shaikh Saad, as if returning to camp for the night. The concentration of the division was completed at 9-30 P.M., and, a quarter of an hour later, the march was commenced. The three infantry brigades had formed up in line of columns of fours, with an interval of thirty yards between the brigades, the 35th, to which the 62nd Punjabis had been attached, being on the right, the 19th in the centre, and the 21st, with the addition of the 1/9th Gurkhas, on the left. A small advanced guard was supplied by the 19th Brigade, and the

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others were responsible for securing the flanks. The five batteries of artillery followed the infantry in line of battery column, escorted by one company of the 128th Pioneers, then came the ambulances and the water-supply column of twenty army transport carts, and lastly the rear guard of one company of the 128th. It seems that the 6th Cavalry Brigade followed the division.

The night was fine but cold, and there was a heavy dew. The moon was in the second quarter, and as the ground was level and the enemy's troops were not encountered, the division reached the position of deployment at midnight. The infantry then formed up facing west in line of brigades; each brigade was in line of battalions in column, with intervals of fifty yards between the battalions, and the intervals between the infantry brigades were 1,000 yards. The other troops, including the cavalry, were placed behind the infantry, and when the deployment had been completed at 2-30 A.M. the remainder of the night passed without incident.

While this movement was in progress the Corps Artillery had taken the place of the batteries of the 9th Artillery Brigade, and the troops of the 28th Infantry Brigade had moved into the positions evacuated by the 7th Division. As the leading units, the 56th Rifles and the Leicesters, arrived after the division had marched off, some difficulty was experienced, owing to the broken nature of the ground, and the many irrigation channels, in finding the trenches; but eventually the two battalions settled down to hold two miles of entrenchments. The other battalions did not get into position until 3-30 A.M. on the 13th, and no further forward movement was made partly for this reason, and also because the Turks were understood now to be in the trenches lying on either side of Chitab's fort.

At day-break, about 7 A.M., on the 13th January, a thick mist rose, and as a result the advance of the 7th Division could not be undertaken until about 7-30 A.M. The brigades then pushed forward in echelon from the left, the 21st Infantry Brigade leading, the 19th

Infantry Brigade 1,000 yards behind and at the same interval to the right, and lastly the 35th at a similar interval and distance. The 20th Field Battery was attached to the 21st Brigade, the rest of the artillery, the ambulances and the water-supply column followed the 19th Brigade, and the Cavalry Brigade marched on and secured the right of the division.

The troops of the 21st Infantry Brigade followed a compass bearing of 275° , the newly arrived 1/9th Gurkhas and the 41st Dogras being in front, each in two lines of small columns; and the former furnished an advanced and a left flank guard. Four hundred yards behind were the 9th Bhopals and the 2nd Battalion Black Watch, and then at 400 yards distance came the 6th Jats. The first line transport and the machine guns of the brigade marched some hundreds of yards further back. There was practically no opposition, only a few Arabs being seen, and, at 9-30 A.M., the Wadi was reached and crossed, the infantry wading through two channels each with about two feet of running water. The unusually steep banks leading to and from the bed of the stream were, however, a serious obstacle for the guns and wheeled transport, and General Norie, therefore, halted until 10-30 A.M., while the 9th Bhopals prepared ramps on both banks of the stream.

At about 9 A.M., the Cavalry Brigade had also passed over the Wadi in the vicinity of the village where opposition had been encountered on the 12th January. Again there was some firing, and a number of villagers and a few mounted Arabs hurried away upstream. As the guns of S. Battery were engaged in crossing the Wadi fire was not opened by the British, but, soon afterwards, a body of about 800 Turkish horsemen appeared in the area to the north-west, and these were driven off by gun-fire at a range of 3,500 yards.

Meanwhile the 19th and 35th Infantry Brigades had reached and crossed the river; but, although the two companies of the 128th Pioneers at once set to work to cut out a road for the main force of the artillery in the banks of the Wadi and neighbouring canals,

the whole of the guns had not crossed until nearly 1 P.M., much of the transport was not over by nightfall, and the ambulances were obliged to open and remain on the right bank and from four to five miles from the scene of the fight.

The task now allotted to the 21st Infantry Brigade was that its units were to advance and clear up the tactical situation; that is to ascertain the positions of the enemy's entrenchments, and obtain information as to the numbers and dispositions of the Turkish forces. General Norie was then to hold fast the troops that were garrisoning the left of the enemy's line, but without involving the brigade in a close action, while the artillery crossed the Wadi. Patrols apparently had not been sent forward for the purpose of locating the enemy's positions while the Bhopals were engaged in ramping the banks of the stream, as the country was so flat and featureless that there were no landmarks on which to direct them; it was also no doubt desired to keep the Turks as long as possible in ignorance of the presence of the 7th Division on their flank. The brigade therefore marched off again on a bearing of 245°, covered by an advanced guard of the 1/9th Gurkhas, and the enemy were not encountered until the leading company was shelled, at about 10-45 A.M., by two Turkish guns that were now visible in the distance. A quarter of an hour later heavy rifle and machine gun fire was opened from the left front, and apparently from a locality 1,200 yards away, towards which the Gurkhas now turned. The leading company was reinforced by another company shortly before noon, and, after advancing for a time by short rushes, the two were checked and obliged to entrench at a distance of 900 yards from the enemy. Orders were then sent up that the Gurkhas were not seriously to commit themselves in the fight, and the remainder of the battalion was therefore moved into a position behind the left of the advanced companies so as to protect their left flank.

While this action had been in progress the 41st had also found themselves under the fire of artillery at about 11 A.M., and then under enemy musketry which came in the greatest volume

from their left front. No sign of the enemy's infantry could be seen, with the exception of a body of about one and a half battalions which were 2,000 yards away and apparently moving up the Wadi against our left, but one gun was visible in the open 1,600 yards distant, and the rest of the battery could be distinguished a little further away and to the east. One company of the 41st now joined in the attack which was being made by the Gurkhas, but experienced heavy losses in attempting to close with the Turks. The remainder moved towards the single gun, and, as a result, were separated from the Gurkhas. The main body of the 41st was eventually stopped when within 1,000 yards of the gun by a violent rifle fire which was being delivered from a belt of scrub. Meanwhile the 9th Bhopals had been thrust into the interval between the Gurkhas and the 41st, and the Black Watch had come up on the right of the latter.

During the advance of his battalions General Norie had despatched a report to the headquarters of the 7th Division describing the situation, and at about noon he received directions to wait until the remainder of the guns, which were then crossing the Wadi, came into action before pressing forward. At the same time orders were sent out by General Younghusband that the 19th Brigade was to prolong the right flank of the 21st Brigade, and endeavour to outflank the enemy and to reach the Tigris. As soon as the main body of the artillery opened fire Norie gave instructions for his troops to go on, and for the 20th Battery, which was already in action, to move forward and support the infantry more closely; he also put into the fight his last reserve, the 6th Jats. At 1 P.M. therefore all five battalions of the 21st Brigade were engaged in a violent struggle with the Turks, who were both holding the trenches on the left of their line and were also lining a low bank or dam running east and west across the space between the Wadi and the marsh. Some portions of the infantry were not more

than 150 yards from the Turks, and the 20th Battery was within a mile of the front of the brigade and 2,700 yards from the enemy's guns.

The 19th, 28th, and 1/1st Sussex Batteries, and the 23rd Mountain Battery, were now firing from a position near the Wadi and some 4,000 yards behind the left of the 21st Brigade. But, owing both to the proximity of the infantry to the enemy's position, and to the difficulty of maintaining communication with the artillery observing officers because of the shortage of cable and other causes, it seems that the gunners only fired intermittently on the enemy's artillery and on any troops that were seen to be in movement, and not on the troops that were actually opposing the 21st Brigade.

Brigadier-General Harvey, who was now commanding the 19th Infantry Brigade, had kept the Seaforths and 28th in hand, sending forward two battalions, the 125th on the left and the 92nd on the right, and these units only came under distant gun-fire during the first two miles of their march. A halt was then made for the purpose of carrying out reconnaissance, and in the course of their subsequent advance the 125th and 92nd began to open out into extended order, and also brought their right shoulders up with the object of gaining touch with the 21st Brigade. When another mile and a half had been covered Turkish troops could be seen to the left front apparently in the act of withdrawing. It seems that these troops escaped the notice of the British artillery, which was some distance away and no doubt now hampered by the atmospheric conditions—mirage and dust; but, on coming under the fire of the rifles and machine guns of the men of the 19th Brigade, they at once took cover and began to reply. Both battalions continued, however, to gain ground, and soon were so hotly engaged that, at about 2-30 P.M., a company of the 1st Battalion of the Seaforth Highlanders was sent up on the left of the 125th. This was followed at 3 P.M., by a second company, and soon afterwards the 28th Punjabis moved forward and prolonged

the right of the 92nd. The battle then remained stationary for some time, while our men hastily made cover for themselves and our guns occasionally fired a few rounds.

Earlier in the day Younghusband had despatched two messages to the headquarters of the Tigris Corps. In the first, which was sent off at 9-15 A.M., and received three hours later, he reported that the leading brigade had crossed the Wadi, that only a few Arabs had been encountered and these had retired to the north-west before the cavalry, and that the advance would be continued in a south-westerly direction and towards the defile between the Tigris and the Suwaikiyah marsh. The second was despatched at 1-30 P.M. and received at 3-45 P.M., and was as follows: "Norie's Brigade attacking in a south-westerly direction, Harvey's Brigade prolonging down towards the river on Norie's right. All batteries in action also firing south-west at 3,500 range at the rear of the enemy's guns and trenches. Enemy's guns firing directly to their rear. From this it would appear that they are being pinched between Kemball and the 7th Division. Rice's Brigade still in reserve. (The 35th Brigade after having assisted the transport across the Wadi, had moved to a position near the main body of the artillery.) I don't think we have many casualties."

At 4 P. M. a staff officer, who had gone down the Wadi for about, half a mile beyond the left of our line, had reported that a body of three Turkish battalions was apparently retreating up the Tigris. Younghusband, who seems, as has been shown above, to have believed that his division had almost cut off the Turkish troops standing on the Wadi from the Hannah defile, and that he and Kemball were engaging the same entrenchments from different sides, now directed the 35th Infantry Brigade, with the exception of the 102nd who remained to guard the artillery, to go in, and as he supposed closed the gap between the 19th Brigade and the Tigris. At the same time the four guns of the 23rd Mountain Battery were ordered to move to the right flank of the 19th Brigade. General Rice accord-

ingly sent instructions for the troops of the 35th Brigade to advance, the 1/5th Buffs being on the right and the 97th on the left, each in two lines, the 37th in support and the 62nd in reserve. As the units went forward they were met with a fairly heavy fire of shrapnel, which inflicted a few casualties, but unfortunately stampeded a large portion of the first line transport. The battalions, however, pushed on, and when, at about 5-15 P.M., a few minutes before sunset the Buffs came into line with the 28th Punjabis, the two rushed into the eye of the setting sun and drove back the Turks. Finding themselves under enfilading fire the two battalions were then obliged to withdraw for a short distance and here they entrenched. The 23rd Mountain Battery did not reach the 19th Brigade until the light was too dim to permit of fire being opened.

It is now time to refer again to the movements of the Cavalry Brigade. After crossing the Wadi the brigade had, at 10-45 A.M., gained a position on the right of the infantry and about two miles from them, and here the cavalry remained until noon. Soon afterwards the Turkish cavalry came forward from the north-west, but were shelled by the guns of S. Battery at a range of about 3,000 yards and driven off with loss. The Cavalry Brigade then moved westwards for a mile and subsequently north-westwards over the ground where the enemy's horsemen had been shelled, finding some wounded men who were made prisoners. At 4 P.M., as a result of the report of the staff officer to which reference has been made above, the brigade received orders to march southwards and cut the enemy's line of retreat up the Tigris. After advancing for some distance the troops came under the fire of artillery and then under rifle fire, and, in order to avoid heavy casualties, they now fell back in a north-westerly direction, halting not far from the Suwaikiyah marsh. Here some Turkish infantry who were occupying the edge of the marsh were driven away.

At about 4-40 P.M., when the mirage would have disappeared, troops had been observed by Younghusband to be advancing against the enemy's position from the direction of Shaikh Saad. This information was passed to all the infantry brigadiers, who were directed to press on their attacks if possible; and orders were also sent to the cavalry to carry out a dismounted advance on the right of the 35th Brigade. At this time the 16th Cavalry were acting as escort to the Horse Artillery guns, and of the other regiments General Roberts ordered the 14th Hussars and the 4th Cavalry to deliver the attack, keeping the 7th Lancers and 33rd Cavalry as escort to the horses. The sun set on the 13th January at about 5-20 P.M., and night therefore, was coming on before these units reached the neighbourhood of the 35th Infantry Brigade. In the dusk it seems that the troopers were mistaken for Turks, and coming under strong fire from our infantry they withdrew again to their horses. Later on the whole brigade rode over to the Wadi and bivouacked near the headquarters of the 7th Division.

At nightfall General Younghusband sent a message, which was received at 7-10 P.M., by General Aylmer, as follows. "My troops ring round the Turks except for a small portion by river which I hope to fill shortly. Troops from the direction of Shaikh Saad are advancing and heavy fire still going on. Troops taking up positions they now hold for night, our cavalry have operated on my right flank." Later on a further report in regard to the dispositions of the 7th Division was made in greater detail, and this was received at about 11 P.M., at the headquarters of the Tigris Corps. But, as will appear, General Aylmer had, through the Flying Corps, already gained a more just appreciation of the position of the division than was actually possessed by its commander.

Early in the morning General Kemball had been informed that the batteries of the Corps Artillery were earmarked for the support of the 7th Division. They might, however, as a temporary measure, be used to assist the 28th Brigade in the advance against Chitab's

fort and the trenches on either side of it, which were believed to be held by the enemy. Kemball's reconnoitring patrols had at first stated that Chitab's fort was strongly garrisoned, and soon after 9 A.M., the guns, therefore, commenced firing on it; but later reports were to the effect that only a few scouts could be seen to the east of the Wadi.

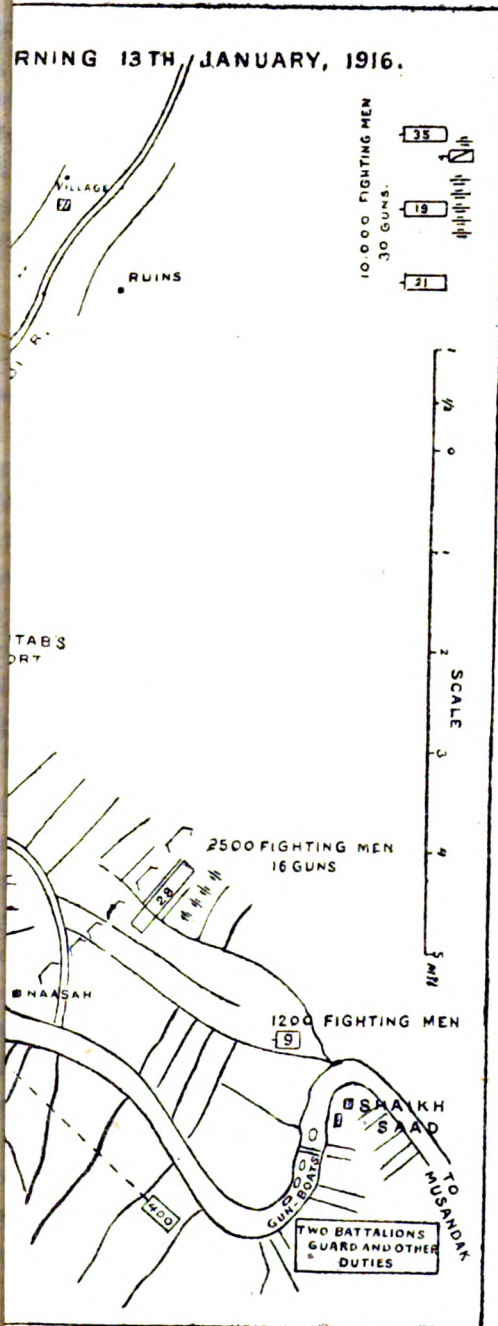
It seems that the first reconnaissance by aeroplane was made at about 9 A.M., and, an hour later, the airman, after having circled over the 28th Brigade as a signal that the Turks were not holding the trenches near Chitab's fort; made his report. This was to the effect that no Turks had been seen in the area between the 28th Brigade and the enemy's main position on the Wadi, which was apparently held by 2,000 infantry and 500 cavalry. Six of the enemy's guns also were being moved along a route leading to the Turkish left.

Three gun-boats, the Gadfly, Crane-fly and Dragonfly, the Butterfly had been left at Shaikh Saad to assist the troops in safeguarding the bridge, had meanwhile drawn level with Kemball's infantry. At about 11 A.M. these gun-boats, which had then steamed to a point some 7,000 yards from Orah, the right bank column being on their left flank at Umm-al-Tamman, opened on the right of the Turkish position.

Kemball now began to advance, the Leicesters moving forward on the left and the 56th Rifles on the right, followed by the 53rd and 51st Sikhs. No resistance was encountered, and, after the fort had been occupied at about noon, the troops threw up a line of trenches facing north west and half a mile beyond it; the gun-fire of the 7th Division away to the north being now distinctly audible.

The Corps Artillery, which had followed the 28th Brigade, then came into action near Chitab's fort and registered on a few Turkish entrenchments that were visible from this building, while patrols from the units of the 28th Brigade reconnoitred the enemy's position carefully. The reports that were brought in by these

Map No. 3.



patrols were to the effect that the Turks were holding a position behind the Wadi, and about one and a half miles from the localities that had been occupied by the 28th Brigade; and that the enemy were in loop-holed trenches and were still engaged in digging themselves in. But it seems that the existence of a position consisting of a line of small redoubts, with low parapets, placed in a slight depression behind the trenches was not definitely ascertained.

At about 2 P.M. another reconnaissance was made by air, and on the return of the airman, Aylmer learnt that the 19th and 21st Brigades, supported by 26 guns, were advancing southwards in the area between the Wadi and the Suwaikiyah marsh and at right angles to the enemy's left, while the 35th Infantry Brigade was in reserve near the Wadi. The British were being opposed by a line of Turks, supported apparently by four guns which were firing from the left of the original position on the Wadi. The gap at Hannah had been entrenched and was held by a couple of hundred infantry who were near the marsh. A column of 4,000 men had also been seen which was apparently moving up river from Hannah. There were four guns behind the Turkish right on the left bank, but on the right bank only a few Arabs.

The substance of this message was passed to Kemball, and reached him at about 4 P.M. and as his own patrols had recently reported that the bombardment now being made by the ships which after dropping down stream were again moving forward and heavy guns were causing the enemy to evacuate their position—that is the advanced trenches that were visible on the bank of the Wadi—Kemball resolved to deliver an assault after communicating with the gun-boats and securing the promise of support from their guns. Orders accordingly were issued that the brigade was to advance and break through the portion of the Turkish line which lay opposite to its right, and then drive the enemy's troops southwards against the bank of the river. The principal attack was confided to the 56th Rifles with the support of the 53rd Sikhs

the Leicesters were to advance on their left followed by two companies, of the 51st Sikhs, and the remainder of this regiment was to be held in reserve. (Map 4.)

The 56th accordingly went forward, two companies forming the firing line and two being in support, followed by the 53rd; and covered by our gun-fire the men made rapid progress. The enemy reserved their fire until the leading companies were 600 yards from the main position, which was invisible from our batteries, and was about 400 yards beyond the Wadi, and then a stream of shell and bullets was poured out against our troops. Fortunately the fire was ill-directed, most of the bullets going high above the heads of the men. They were able, therefore, to reach a water cut lying 100 yards from the Wadi, where the reserve companies joined the firing line but in doing so diverged somewhat outwards. The bulk of the 56th, followed by a large proportion of the 53rd, now again rushed forward in well ordered lines, but were met with so violent and well aimed a fire that comparatively few men reached the further bank of the Wadi, after wading waist deep through the stream. As the enemy were untouched and therefore unshaken by our gun-fire, the men of the two battalions, after waiting for some time under the cover of the right bank of the Wadi, fell back in the dusk to the water cut, where additional cover was hurriedly improvised, and the wounded were collected. Since neither food nor ammunition came up to them, and the 51st Sikhs who were in reserve could not be found, those portions of the 56th and 53rd that had made the assault eventually withdrew to Chitab's fort, which was reached at 2 A.M. on the 14th January.

The Leicester battalion also failed to gain the enemy's position. Its advance had, for some distance, been prosecuted without opposition, but when the leading companies were about 1,100 yards from the Wadi, a strong fire was opened from a line of trenches beyond it. The British, however, pushed steadily forwards, and, at about 4-45

P.M., had reached a point about 450 yards from the enemy. Just when preparations were being made for the delivery of an assault, the men found themselves under heavy fire from rifles and machine guns which was being delivered from the area beyond their right flank. The 56th had disappeared, only a few men of the 51st were visible away to the right: and, in these circumstances, and also since the gun-boats had been obliged by the fire of the Turkish artillery to withdraw to the vicinity of Umm-al-Tamman, the commander of the Leicesters decided to entrench the ground that was being occupied by the battalion, refusing both of its flanks. At 8 P.M. touch was established with about 100 men of the 51st, 53rd and 56th, with whom were some Gurkhas, and the little force then settled down for the night to hold a line about 800 yards in length. At 11 P.M., however, verbal orders were received that the group was to fall back for half a mile and again entrench; and this retirement had been completed by 2-30 A.M. on the 14th January. The Turks made no attempt directly to interfere with this detachment, although their desultory firing, which occasionally became violent, continued throughout the night.

The general reserve did not take any part in the fighting on the 13th January. Early in the morning the 9th Infantry Brigade had advanced to the vicinity of Naasah, and here it remained until, at 4 P.M., the observer on a tower of scaffolding that had been erected at Shaikh Saad, reported to General Aylmer that the Gadfly and the other gun-boats were again moving up-stream. Orders were now sent to the Brigade to advance to the support of General Kemball. This was done, but Chitab's fort was not reached until 6-30 P.M., when the troops in the darkness found some difficulty in passing through the transport that was collected there, and also in getting clear of the Corps Artillery. Eventually the brigade took up a line of outposts in the vicinity of the fort, and covering the troops round it.

As soon as General Aylmer had ascertained what was the situation of his force at nightfall, directions were sent out for the renewal of the attack on the 14th January. Younghusband was warned in

regard to the possibility of a counter-attack by the 4,000 Turks that had been seen in the Hannah Sannaiyat defile, he was informed of the failure of the 28th Brigade and was asked to report in cipher the exact positions of his troops. Notification was sent to the gunboats and to the right bank column, which had returned at dusk to Shaikh Saad, that the action would be continued on the next day; and two companies of the 128th and one company of the 107th which had come up from the battlefield of the 6th—9th January, were ordered to escort two loads of hand-grenades to Chitab's fort, arriving there not later than 7 A.M. on the 14th.

At 10 P.M. Kemball reported fully on the situation of his brigade, and he subsequently received orders that a further assault was not to be attempted until powerful support on the part of the artillery could be assured for the infantry. At 11-15 P.M. in notifying the positions of the units of the 7th Division, Younghusband stated that two four-gun enemy batteries had been seen on the bank of the Tigris, but that throughout the afternoon the Turks had been retiring westwards.

The night of the 13/14th January, which was cold and windy, passed without any attack being made on the 7th Division. The Turks, however, maintained an unremitting fire which occasionally increased into great violence, one burst of musketry at about 4 A.M. after which it appears that the enemy finally withdrew, being unusually prolonged. The British nevertheless replenished ammunition, collected wounded, and as far as was practicable issued water to the men. Early on the 14th the infantry patrols of the division found that the enemy's line was empty and learnt from a few prisoners that the Turks had fallen back. Later on a squadron of the 7th Lancers reported that what appeared to be a rear-guard was entrenching in the Hannah defile, while other units seemed to be withdrawing. But when the Cavalry Brigade advanced, the Turkish guns opened fire causing a few casualties.

After having sent a report to General Aylmer, Younghusband ordered the 35th Infantry Brigade and the 20th Field Battery to march at 8 A.M. to the Tigris in support of the cavalry; and an

hour later this brigade was directed to move towards and close the Hannah defile while the two other brigades moved down to the river. It seems that these orders were varied, for it appears that the 35th and 19th Brigades and the artillery reached the bank of the Tigris at 10 A.M. but the 21st Brigade did not come up until some hours later. After the 35th Brigade had arrived on the bank of the river one of its companies was sent forward towards Hannah, and it was then ascertained that the enemy were entrenched there on a frontage of some 2,000 yards; and against this position the 28th Field Battery subsequently fired a few rounds. Not long afterwards the Turkish artillery opened fire, and as a result the 35th Brigade was left to take up a line of outposts along a frontage about two miles from Hannah, the artillery being in observation behind it, and the cavalry watching the northern flank; but the remainder of the division went into bivouack further down the Tigris. The weather was now dull and cold, and a gale of wind was blowing which raised clouds of dust. Nevertheless desultory firing went on throughout the day, and, at 1 P.M. the Gadfly, which had steamed forward to assist the infantry should this be necessary, was hit and a good deal damaged by a shell fired by the Turks from a 4.8 inch gun. Fortunately, however, the shell did not burst.

After sending the 9th Infantry Brigade forward early on the 14th to entrench along a line about 1,200 yards from the Wadi, Kemball had observed what were taken to be masses of the enemy retiring slowly towards Hannah. A message consequently was sent to the headquarters of the Corps that reconnaissance was being made and that the brigade would push forward in pursuit. It seems, however, that the troops that were seen by Kemball's men were the 35th and 19th Brigades, and when their presence had definitely been ascertained, the 28th Brigade and the great part of the 9th Brigade moved to the Wadi and halted in the angle between this stream and the Tigris; but the 107th Pioneers were left to clear the battlefield, and the 128th set to work to ramp the banks

of the Wadi at a ford near its mouth so as to enable the heavy artillery, and the second line transport, which was now being brought forward, to cross over the stream. The passage of the Wadi proved to be by no means an easy operation, and it was 3 P.M. before the Corps Artillery began to undertake it. The greater part of the guns crossed in safety but the two guns of the 104th Heavy Battery were unable to pass through the ford, and it was therefore late in the afternoon before any of the transport vehicles could begin to move over. Heavy rain began to fall in the evening, and the bottom of the ford had by this time also been churned into a morass. The last of the transport in consequence did not reach the right bank until noon on the 15th January. Owing to the gale and strong current in the Tigris the bulk of the shipping also was unable to gain the Wadi during the 14th.

In the course of the morning General Aylmer had received from an airman confirmation of the reports that the enemy were holding the mouth of the Hannah defile, and at noon and again an hour later he warned the 7th Division not to attempt a further attack until the position had been subjected to a strong bombardment. At about 4 P.M. a message came in from Younghusband that the 7th Division had been concentrated in the area lying opposite to the ruins which were about two miles above Orah; that reconnaissance was in progress, and that the guns were ready to open fire. In the evening representations seem, however, to have been made to General Aylmer, who had reached the bivouack of **Kemball's** brigade, that the Turkish position was too strong to be carried by means of a frontal attack. It was also pointed out that many units both of the 7th Division and 28th Brigade were without rations. The idea of a further advance was, therefore, abandoned for the time being. After nightfall a company of the 93rd was sent to the right bank so as to secure the "Medjidieh" and the gun-boats from the fire of marauders, and the rest of the force remained, drenched and miserable, in the downpour on the left bank of the Tigris.

From the statements of prisoners captured in the battle it was ascertained that the British had been opposed by the reconstituted 35th Division (the combined 35th and 38th Divisions) and the 52nd Division numbering about 11,000 fighting men, besides cavalry and camelmen. Practically the whole of this force was on the left bank of the Tigris, for the large majority of the troops that had been engaged with the 28th Brigade at Shaikh Saad had afterwards been ferried across the Tigris in kalaks (rafts on inflated skins) and kuffahs (coracles). The numbers in action on each side, therefore, were approximately equal.

Although the Turks were certainly out-mancœuvred there can be no question that the results of the action were disappointing for the British, since they were unable to exploit the surprise which was in the first instance inflicted on the enemy. The action was not fought altogether on the lines indicated in General Aylmer's orders, for the 28th Brigade was held back until it was ascertained that the Turks were not occupying the trenches near Chitab's fort instead of engaging the front of the enemy's position. Further, this brigade, as it turned out, was not sufficiently powerful to hold fast the main body of the Turkish forces in their trenches. As a result no portion of the enemy's army was in fact attacked from two directions. But, apart from this, the cause of the failure seems to have lain in the time expended in moving Younghusband's artillery over the Wadi and neighbouring channels, a difficulty which might, it may be supposed, have been foreseen and discounted and from this it resulted that the bulk of the infantry did not at once deliver their attack. The Turks, therefore, were given time in which to re-adjust their dispositions, and, after moving through a belt of scrub, the Turkish infantry either occupied the disused irrigation channels with which the whole face of the ground was wrinkled, or obtained cover behind a dyke which had been made by the Arabs for the purpose of controlling the annual floods. When the attack was made the British infantry did not at first receive

the strong support which is necessary for the reduction of the enemy's power of resistance. Owing to lack of means of communicating effectively between the observers and gunners, and to the influence of the mirage on visibility, the fire of the artillery could not subsequently be directed on the enemy's positions, and the infantry therefore failed to carry them.

It is never easy to maintain direction and to apply the sense of locality when in action, for many things then combine to focus attention on other purposes ; and in any circumstances it is most difficult to do so when the ground is absolutely flat and without features. Additional difficulties were created for the British by the fact that the maps that were available were not accurate, and it seems, therefore, that General Younghusband believed that he had almost surrounded the Turks, whereas, in fact, his troops were facing south and south-west and were at some distance from the river. Had this been realised his measures would certainly have been different from those which were actually taken, and the battle might have ended more favourably for the British. As in the case of the 7th Division, but for other reasons, the attack of the 28th Infantry Brigade, which under better auspices might have been decisive, failed through lack of artillery support. In the end, therefore, the British bought a barren success at the cost of 1,613 casualties, 218 of whom were killed ; and they did not find themselves any nearer the fulfilment of their task.

BRITISH ORDER OF BATTLE.

12TH JANUARY, 1916.

Headquarters, Tigris Corps, under Lieut -General Sir F. Aylmer.

Headquarters 7th Division, under Major-General Sir G. Young-
husband.

19th Infantry Brigade, Brig.-General A. B. Harvey.

1st Seaforth Highlanders.

28th Punjabis.

92nd Punjabis.

125th Napier's Rifles.

21st Infantry Brigade, Brig-General C. E. de M. Norie.

2nd Black Watch.

6th Jat Light Infantry.

9th Bhopal Infantry.

41st Dogras.

attached, 19th Gurkha Rifles.

35th Infantry Brigade, Brig-General G. H. B. Rice.

1/5th Buffs (Territorials).

37th Dogras.

97th Deccan Infantry.

102nd King Edward's Own Grenadiers.

attached, 62nd Punjabis.

9th Field Artillery Brigade.

19th, 20th, 28th Field Batteries, eighteen 18-pounders.

Ammunition Column.

23rd Mountain Battery, four 10-pounders.

1/1st Sussex Field Battery (Territorial), four 15-pounders.

Two companies, 128th Pioneers.

Signal units.

Ambulance units.

Transport units.

Other troops.—

28th Infantry Brigade, Major-General G. V. Kemball.

2nd Leicestershire Regiment.

51st Sikhs.

53rd Sikhs.

56th Punjabi Rifles.

9th Infantry Brigade, Lieut.-Colonel A. M. S. Elsmie.

1/4th Hampshire Regiment (Territorials), less one company.

2nd Queen Victoria's Own Rajput Light Infantry, less two companies.

107th Pioneers, less one company.

Heavy Artillery.—

72nd and 77th Five-inch, four-gun Howitzer Batteries.

Two guns 104th four-inch Battery,
attached 61st 4.5 inch six-gun Howitzer Battery.

13th Company Sappers and Miners.

Part of Provisional Battalion of drafts for units in Kut-al-Amarah.

Signal units, Ambulance units, Transport units.

6th Cavalry Brigade, Brig.-General H. L. Roberts.

14th King's, Hussars.

7th Haryana Lancers (less det. in Kut-al-Amarah).

16th Cavalry, less one squadron.

33rd Queen Victoria's Own Light Cavalry (less dets. in
Kut-al-Amarah and Nasiriyah).

S. Battery Horse Artillery, four 13-pounders.

Signal unit, Ambulance unit, Transport unit.

On the battle-field of 6th—9th January, guarding wounded, etc.—

Two companies 128th Pioneers.

One company 107th Pioneers.

Part of Provisional Battalion.

On voyage up the Tigris.—

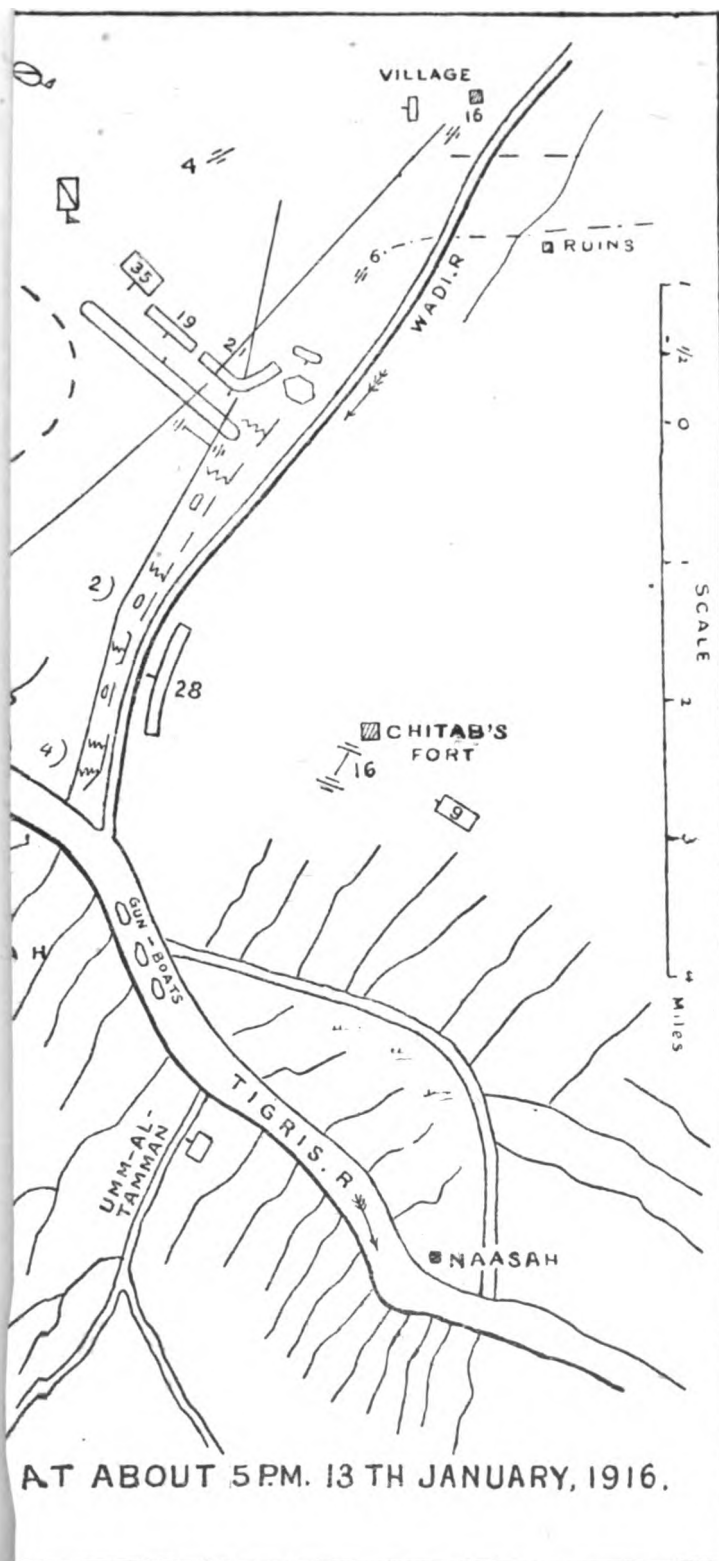
93rd Burmah Infantry.

Naval vessels, each carrying one four-inch gun and machine guns.—

Butterfly. Dragonfly. Gadfly. Crane-fly,
also Minesweepers.

River transport, about seven river paddle steamers, two tugs,
and the barges which were generally lashed one on each side of
each vessel.

Map No. 4.



SMOKE AS A WEAPON OF WAR.

Major R. T. Holland, D. S. O., M. C. General Staff A. H. Q.

I.—OBJECT OF SMOKE.

In spite of the fact that modern warfare has produced a great development in the use of night operations, it may still be taken as an axiom that man is by nature a day-moving animal. He prefers to fight his enemy in the light of day rather than in the dark. Daylight gives himself confidence and a feeling of superiority.

If, therefore, we can equip our fighting forces with a weapon, which produces conditions of night for the enemy while preserving conditions of day for ourselves, it will be conceded that we add a most powerful weapon to our armoury. Such conditions the *skilful* use of smoke can produce.

Field Service Regulations, Vol. II, crystallises the object of producing these conditions in the words "Smoke is used to obtain concealment either as a means of effecting surprise, or of reducing casualties." Sometimes we hide our own dispositions. Sometimes we blind the enemy. In all cases the smoke screen must be placed close to the object it is intended to hide or blind.

The skilled use of smoke is termed "Smoke Tactics" which Sir William Birdwood has described as "one of the most interesting means of securing that vital factor in war-surprise"*. It will be generally admitted that surprise is a principle, which suffered much neglect during certain periods of the Great War, and which always handsomely repaid attention bestowed on it. It seems clear, therefore, that smoke as a weapon deserves the earnest consideration of sailors, soldiers and airmen, for these remarks apply equally to the three elements, in which warfare is now waged.

* Foreword to "Smoke Tactics," by Lieut.-Colonel P. R. Worrall.

II.—HISTORY.

Smoke is by no means a new weapon. The earliest historical reference to it is probably the smoke screen, which protected the Israelites during their march from Egypt to the Promised Land (*Exodus*, xiv., 19).

In the civil wars of the Roman Empire both Cæsar and Pompey used this weapon. In sea fights in those days the smoke galleys moved in advance to the windward quarter and emitted their cloud of smoke. When the enemy was blinded, the attacking ships moved up in daylight and fell on him. At the siege of Marseilles (about B.C. 50) Cæsar's troops used smoke to conceal the direction of the assault with the result that the defenders could not concentrate. Cæsar and Pompey were also in the habit of blinding each other's archers by means of green wood smoke.

The Byzantians and at a latter period the Saracens employed this weapon. The former even manufactured a form of smoke bomb.

Then came the introduction of gunpowder. By the 15th century the smoke of black powder had begun to take charge of the atmosphere of battle-fields, and the deliberate use of controlled smoke was at a discount. The highlanders of Scotland continued to use it during the Middle Ages. Their method was to light the grass on the hillside in order to prevent observation of some locality or route. It is interesting to note that the highlanders of the Indian Frontier use the same method to-day, and have before now surprised a piquet after smoking it by lighting the surrounding grass and scrub.

Throughout the 18th and 19th centuries the smoke of black powder continued both to make difficulties and give advantages on the battle-fields of Europe. It will be remembered how at Waterloo the smoke cloud hanging in front of the British position hid the opposing forces from one another,

At sea too during this period the dense smoke cloud which hung round ships of war in a battle undoubtedly assisted the boarding operations, which were then in vogue.

As long as black powder held the field the use of controlled smoke was forgotten. When smokeless powder was introduced, the employment of controlled smoke still remained a forgotten art. Von der Goltz, writing in 1883, visualised the smokeless battle-field of the future—the increased importance of reconnaissance, the clearer view and grasp of the situation, which a commander would possess owing to the absence of smoke from gun and rifle. But Von der Goltz and other students of war of that period seem to have lacked the imagination to visualise the increased power in the hands of a commander who harnessed that same smoke to his own use, and so forced his enemy to fight in the dark.

In 1885 the French adopted a smokeless powder, and within a few years the propellants used by all the armies of Europe were smokeless. The smoke weapon was forgotten on land and sea. No mention of it is made in the histories of the South African War or the Russo-Japanese War. The word does not appear in our pre-war Field Service Regulations.

III.—THE GREAT WAR—ON LAND.

Then came the Great War. The enormous casualties and the power of the machine gun caused men to think of new weapons and new methods. Imagination and inventive powers were quickened. Smoke re-appeared as a weapon by land and sea, and made its début in the air.

It was only employed on land to any extent in France and Italy, and to a minor degree in Palestine. The first use in the war was probably the lighting of a haystack north of the La Bassée Canal in October 1914, to cover the withdrawal of a company, which was in danger of being cut off.

In the winter of 1914-15 experiments with smoke candles were made by the Indian Cavalry Corps, but as a recognised weapon

smoke was not used on a large scale till the battle of Loos (September 1915). Here smoke candles were used alternatively with the gas to prolong the period of discharge. Two minutes before the infantry left the front line all gas was turned off and the smoke screen thickened. Smoke was also used from 2-inch mortars to cover a gap of 200 yards between the 7th and 9th Divisions. Loos gave smoke a bad name, since in several cases it caused loss of direction. It must be remembered that if smoke is generated by candles or other means in our own lines, the infantry start in smoke and not in daylight, as is the case with an artillery or rifle grenade smoke screen.

At the end of 1915 General Tudor, who became a prophet and preacher of smoke throughout the rest of the war, asked for smoke shell for artillery. Various suggestions for producing smoke were engaging the attention of the Ordnance Committee in England during 1916, and in November of that year smoke shell began to appear in France.

It was not, however, till the battle of Arras in April 1917, that 18-pr smoke shell were included in the creeping barrage covering the infantry attack. This was done on the front of the 9th (Scottish) Division north of the River Scarpe. The attack was completely successful. Owing to the smoke screen casualties were few. It must always be remembered that however good a shot the man behind the rifle or machine gun may be, fire through smoke is unaimed fire, and unaimed fire is worthless.

There were two other interesting developments of smoke during this battle. The first was a distant 18-pr smoke screen to prevent the enemy seeing our creeping barrage from his observation posts and thus realising that our attack had been launched. The second was the use of smoke to protect a flank. The 15th Division was attacking south of the Scarpe. Its attack was held up, thus exposing the right flank of the 9th Division to machine gun fire from

across the river. A battery of the 9th Division blinded the enemy opposite the left of the 15th Division with smoke. This enabled the right of the 9th Division to press forward unscathed and by its advance to assist the 15th Division.

From this time onward smoke came into its own in France. Smoke shells were multiplied, the Tank Corps took up the question of protection by means of smoke, and smoke grenades for infantry were developed. The smoke grenade fired from a rifle proved a most useful platoon weapon, especially when the fighting began once more to partake of the nature of a war of movement. In such fighting the infantry found that they had again to rely on themselves to a great extent for covering fire, and the smoke grenade was a great help in overcoming "strong points" and obstinate machine guns.

The value of smoke for denying observation and screening a flank became thoroughly realised. At Cambrai on November 20th, 1917, we put down a smoke screen lasting four hours on the high ground, which overlooked the right of our attack. Ten days later the Germans used smoke effectually, when they made their counter-stroke in this area. On that day our 12th Division reported that owing to enemy smoke our reserves could not see enough to enable a counter-attack to be planned. On the same day smoke bombs from aeroplanes were used by the Germans.

Throughout this period of the war skill in the use of smoke was exploited. Sometimes we provided a "mixed grill" of gas and smoke repeated on several occasions, and then one day varied the procedure by serving smoke only followed by an infantry attack. Such treatment is apt to impair a defender's equilibrium, and to direct his thoughts towards his respirator instead of his rifle. Smoke was largely used in feint attacks and in concealing the extent of front of attacks. It also proved its value for helping in the difficult operation of crossing a river in the face of an enemy.

When blinding observation posts and points of vantage, it must be remembered that, as it is necessary to put down smoke to windward, a minute or two will elapse before the smoke screen is formed, and therefore the screen must be started a minute or two before the time at which the enemy is to be blinded.

Though smoke was usually employed in the attack, there are several examples of its use in defence. A notable instance is the retirement of the Austrians across the Piave in June 1918. They had been caught in flank on the Montello by the Italians, and, disastrous as the withdrawal proved to be for the Austrians, their losses would have been far heavier, if they had not used smoke.

A good example of Australian initiative may be quoted. On September 29th, 1918, the temporarily formed Australian-American Corps was given the task of forcing the Hindenberg line about Bellicourt. Two American divisions were in front, and the Australians preceded by tanks were to "leap frog" the Americans in the course of the attack. The leading divisions were held up, and most of the tanks, which were equipped with rifles and smoke grenades, were put out of action. The Australians then came up, to the smoke grenades out of the derelict tanks, and with the aid of these grenades were able to push on.

The following were considered to be the disadvantages of smoke on land as the result of experience during the war:—

(1) *The difficulty of keeping direction.*—This can be overcome to some extent by higher training, and, where suitable, by the use of guiding light signals.

(2) *Smoke draws fire on infantry.*—This was sometimes due to faulty smoke tactics. A smoke screen must always well overlap the object to be concealed, and must never be used to conceal halted troops from ground observation.

(3) *Smoke grenades are yet another weight for the infantryman to carry.*—This is a matter of policy. If smoke is worth its place, it must be carried somewhere, either on the man or in transport—at

the expense of something else, if needs be. After our attack at Oppy in 1917 the men of one of our battalions were asked their opinion as to the advisability of carrying smoke grenades. Practically the whole battalion voted for two grenades per man.

(4) *With a flank wind smoke interferes with troops on a flank and obscures their targets.*—There was a case of this in the final advance in Flanders in 1918. One of our divisions was attacking under smoke. The smoke drifted on to the front of the adjoining division, which for a time found difficulty in keeping direction. The British, however, had the initiative, the artificial fog proved a greater handicap to the enemy, and the attack was entirely successful on the front of both divisions.

(5) *A change of wind upsets smoke plans.*—This point must be remembered in framing orders for an operation, and arrangements must be made for issuing such orders as "Fire no smoke," "Fire half smoke," etc., according to circumstances. Even if the wind is blowing straight towards the attackers, there is nothing to prevent a creeping smoke barrage being fired. It is only the location of the smoke screen, which must be changed.

Such are the disadvantages. On the other side of the balance must be placed the undoubted value of smoke during the war in aiding surprise and in saving casualties.

Time after time descriptions of battles have emphasised the help given by natural fog to that side, *which had the initiative*. The "luck" of the Germans in being favoured by fog both on March 21st and on April 9th, 1918, is common talk. Again, the British were only able to continue the construction of a bridge across the Piave in October, 1918, *because there was a fog*.

General Montgomery brings out two striking examples, when describing the storming of the Hindenburg line on September 29th, 1918, in his book. "The Story of the Fourth Army." "By this time the dense mist, which had greatly assisted the attack of the 46th Division in its early stages, had thinned considerably, and the

visibility was much improved. This enabled the enemy to bring effective fire to bear on our troops, and made the tanks an easy mark for hostile field guns" (p. 159). Then later, "The mist now lifted, exposing the infantry and tanks to the view of the enemy holding the high ground round Nauroy, and the anti-tank guns concealed in the village quickly put the tanks out of action" (p. 164).

The following extract from the official report of the operations of the Third Army in France on August 21st, 1918, exemplifies the value of smoke or fog and also one of its inherent disadvantages:—
"The mist was useful in the early stages in screening the tanks, though it was with the utmost difficulty that they maintained direction. The mist lifted about 10 A.M.—a most critical time Had the mist lasted half-an-hour longer, the tanks would have been across the railway and behind the gun positions. As it was, they suffered several casualties from artillery fire."

These examples show the value attributed to natural fog. If smoke is deliberately used as a weapon when and where it is required in the place of this uncontrolled fog, its value must surely be immeasurably greater.

In Eastern countries the dust caused by movement and projectiles is somewhat analogous to the unharnessed smoke of black powder days during a great part of the year. There is, however, great scope for the use of smoke in dusty countries for such purposes as blinding observation posts, screening a flank, feints in a river crossing, etc. Smoke, too, has hitherto untried possibilities in mountain warfare.

IV.—THE GREAT WAR—AT SEA AND IN THE AIR.

Meanwhile the use of smoke had developed enormously at sea. The Germans employed it in the "running" phases of their "tip and run" raids on the east coast of England. Our sailors

adopted generators on board ship (often special boats for the purpose) or smoke boxes thrown over board. At the end of 1916 smoke generators were issued to merchant ships as part of their anti-submarine defence. The ability of ships to manœuvre in any direction facilitates various means of laying smoke screens according to the wind.

Smoke certainly became one of the dominating factors in the plan for blocking Zeebrugge. An earlier scheme for the operation had been worked out by Admiral Bacon and abandoned "chiefly on account of the difficulty of getting a good smoke screen." During the preparation for this great adventure a special factory was established at Dover under Wing Commander Brock, R. A. F. (a son of the Brock of fireworks fame). The main activity of this factory was the development of smoke methods, and it is recorded that one of the experiments produced a thick fog in the Straits, which lasted three days much to the discomfiture of the shipping in those parts. During this period the first experiments were made in artificial clouds generated in an aeroplane to afford concealment from ground observation.

The Zeebrugge operation was carried out on the night 22nd-23rd April 1918. There were 21 miles of coast on which were mounted German batteries, which could fire on our ships. On the whole of this stretch of 21 miles we put down a smoke screen produced by generators on a host of motor launches. As a result a dense "pea soup" fog was added to the darkness of the night.

Smoke tactics now form an indissoluble part of modern naval tactics. The naval side of the subject must be studied by soldiers not only because each service should watch the evolution of the other with a view to fostering a more intelligent co-operation, but also because we must realise that as tanks develop and form a larger proportion of our land forces, so the tactics of this proportion will more and more approximate to naval tactics.

V.—SMOKE-PRODUCERS.

By the end of the Great War the following different methods of producing smoke had been evolved :—

(a) *At Sea*—

Smoke generators on ships or special smoke boats.

Smoke buoys thrown overboard.

Smoke from funnels by generating smoke in the furnaces.

Smoke generators on kites towed by destroyers to make a ceiling of smoke over ships.

(b) *On Land*—

Smoke generators actuated by hand.

Smoke candles or cases.

Hand grenades.

Rifle grenades.

Mortar bombs.

- Smoke shell of various calibres.

Smoke from tanks—

(i) by “projection” from guns or rifle grenades ;

(ii) by “diffusion” generating smoke in the exhaust ;

Improvised methods such as burning red phosphorus in the open, setting fire to straw tightly packed in sacks or damp hay, tar barrels, green wood, etc.

(c) *In the air*—

Smoke bombs dropped to the ground.

Smoke clouds generated in the air for self-concealment.

The advantages and disadvantages of these various methods must be shortly reviewed.

At sea, smoke generators and buoys thrown overboard have proved their worth as the best means.

Smoke generators and candles as land weapons are clumsy and heavy and can only form a screen close to the smoke-producing agency. The same may be said of the hand grenade. The rifle grenade is undoubtedly the best infantry smoke producer.

Smoke shell for artillery have come to stay. The light howitzer proved its superiority to the light gun weight for weight for blinding work. The light gun is required when smoke is included in creeping barrages to conceal our own infantry in the attack.

As regards tanks, "projected" smoke from guns and rifle grenades proved successful, especially from rifle grenades. "Diffused" smoke from the exhaust could probably best be used in the protection of other tanks. The leading tanks can manœuvre into the wind, project smoke to protect themselves, and then diffuse smoke to cover the remaining tanks following them. "Tank Training" emphasises the use of diffused smoke in a withdrawal.

As regards the air, smoke bombs from aeroplanes will certainly be further developed. On September 18th, 1918, on the front of our Fourth Army, arrangements were made for aeroplanes to co-operate with the tanks in masking anti-tank guns with smoke bombs. This method may also be used to supplement the artillery in blinding distant observation posts. The artificial cloud produced by an aeroplane in the air for self-concealment is still in its infancy.

VI.—AFTER-WAR TRAINING MANUALS.

It is interesting to compare the treatment of smoke in our various after-war training manuals. Field Service Regulations, Vol. II, is suitably balanced on the subject, lays down the uses of smoke, and sees more scope for it in attack than defence. The word "smoke" does not appear in either Cavalry Training or Machine Gun Training. Infantry Training and Tank Training both welcome this weapon with enthusiasm, but Artillery Training is luke-warm on the subject. The latter book points out that smoke interferes with counter-battery work and impedes observation generally, that it diverts some guns from their primary task of man-killing, that it may blind friendly troops on the flank, and so on. Artillery certainly has much to lose from an *indiscriminate* use of smoke—especially in moving warfare. As regards man-killing, it is of interest to note that the 9th (Scottish) Division in their successful

attack east of Ypres on September 28th, 1918, fired two smoke shell to one H. E. shell in spite of a density of only one 18-pr per 40 yards of front in their supporting artillery. The object of covering fire (whether provided by artillery or infantry) is to enable the attackers to get home. If smoke fulfils this object, its effectiveness as covering fire cannot be gainsaid, though it is not directly a man-killing agency.

The proportion of smoke to be carried by different arms—infantry, artillery, tanks and perhaps cavalry—requires careful consideration. When weather conditions and the direction of the wind are unfavourable, a large number of shell are required, if artillery is to make an effective screen. Terrain and climate largely affect the question. If a basic minimum is fixed for the various echelons in the chain of supply, the total proportion of smoke required for any given operation must be decided on the factors in each particular case.

VII.—NEED OF DEVELOPMENT.

This outline of the development of smoke brings out something of what smoke has achieved, and some of its disadvantages. This weapon must now definitely take its place alongside the many other weapons of modern war.

Smoke must be developed to help us to a greater superiority over the tribesmen on the Indian frontier. In the withdrawal of a piquet smoke could be put down in or in front of the piquet. Sometimes we could withdraw at once under cover of the smoke; at other times we could wait and fall on the enemy, when he thought the coast was clear. Smoke tactics could also be employed in the consolidation of piquet positions—an operation which caused much trouble to General Skeen's column in 1919—and in many other problems of mountain warfare.

It must be remembered that most of the enemy rifle fire on the frontier is individual aimed fire, and that smoke makes fire unaimed. The rifle grenade has great possibilities as a smoke—

producer in mountain warfare. Transport is of course always a limiting factor in mountainous country, but where ammunition is limited there is much truth in the statement that "the experienced commander would prefer, every time he was called upon to launch his tanks and infantry to the assault, a little smoke to a little shrapnel or J. E." *

The possibilities of smoke have not yet been fully developed. Its tactical employment must be further studied. As with every other weapon, it cannot be used to the best advantage without a high standard of training. The gunner must know the right place to put his shell in every wind, the probable direction of draughts in the hills at the different times of day, and so on. Infantry must be trained in "fire, smoke and movement" instead of the old "Fire and movement." Finally the chemists and manufacturers must strive for improved designs—especially suitable smoke-producers for tropical climates.

We must not wait till war comes, and then improvise tactics, training, design, transport and allocation in the chain of supply of adequate reserves. If war comes, and finds us not prepared to give to smoke its proper place in our armoury, we shall be failing to employ all the resources of the State and exposing our man-power to needless casualties.

NOTE.—The following books have been consulted. They are all of great interest regarding the subject. The information in the last-named book has been largely drawn upon in parts of this article.

"History of the 9th (Scottish) Division"—Ewing (1921).

"The Blocking of Zeebrugge"—Carpenter (1921).

"The Dover Patrol, 1915-17"—Bacon (? date).

"The Story of the Fourth Army"—Montgomery (1919).

"Smoke Tactics"—Worrall (1919).

"Tank and Smoke Tactics," by Lt.-Col. W. D. Croft—*Army Quarterly*, April 1923.

THE CHANAK FRONT.

By Major Amin Bey.

TURKISH GENERAL STAFF.

Translated by Captain G. O. De R. Channer, 7th Gurkha Rifles.

THE FIRST YEAR OF THE WAR.

Following upon the declaration of War, the Allied fleets bombarded the forts guarding the entrance to the Straits on November 3rd, 1914, for about 10 minutes, but did nothing more till February of the following year. At the earnest desire of the Russian Government, who had got into difficulties in the Caucasus after Sari Kamish, the Entente Powers decided to force the Dardanelles, employing the fleet only in the first instance.

The protective arrangements in the Dardanelles which was the door to the capital of the country, had been perfected as far as possible by the commander when the army was mobilised. Several lines of mines were laid under the protection of the guns which were mostly in the Straits themselves. Two infantry divisions and six service gendarme battalions were allotted to the defence of the land.

THE SECOND YEAR OF THE WAR.

The first Attack by Sea.

On February 19th the Entente fleet bombarded the forts in the Straits for eight hours, and repeated the action on the 25th. All the guns in the forts were destroyed. These two offensive actions attracted G. H. Q.'s attention to this quarter and the Land forces were reinforced by two divisions.

From February 26th to March 10th the enemy fleet directed all its efforts to destroying the guns and howitzers in the Straits and sweeping up the mines in the passage. Several small detachments

of naval personnel were put ashore and taken on board ship again. Under cover of this bombardment the enemy were able to enter Krakliq Bay with mine sweepers.

THE NAVAL BATTLE OF MARCH 18TH.

On the morning of March 18th, the hostile fleet began to enter the Straits in several lines and open fire on the interior forts. The fleet was composed of sixteen battleships, several cruisers and torpedo boats.

At 2 P.M. the position was very critical for the defenders of the Straits. Chanak Kala and Kilid-el-Bahr were in flames. The whole system of communications, guns, emplacements and adjoining zones were destroyed. Several of the guns had been buried in the ground, many were damaged beyond repair and the defenders too were weakened in numbers.

At that very moment some unexpected miracles took place before the tired eyes of the defenders. An enemy torpedo boat struck one of our mines opposite Erenkoi and sank. The French cruiser Bouvet, which was following, also struck a mine, and this caused the retirement of the whole French fleet. But the miracles had not ceased! The British cruiser, Irresistible, which came up into the position the French had evacuated, struck a third mine and listed over to one side. The Ocean which hastened up to help suffered a similar fate. The Inflexible, hit by several shells, was obliged to withdraw and the Agamemnon had a like experience. These continual losses showed the enemy fleet that it could not maintain its position. After some hours the ships drew off about 6 P.M. leaving the Ocean and Irresistible to sink to the bottom of the sea.

This naval action resulted in the sinking of three battleships and two torpedo boats, and serious damage to three battleships on the enemy's side. The defenders lost four officers and forty men killed, seventy men wounded, eight guns destroyed and several magazines exploded. Chanak Kala and Kilid-el-Bahr were partially burnt.

THE FIGHTING ON LAND.

After the naval battle of March 18th, G. H. Q. learnt that the enemy were making extensive preparations and that an Anglo-French army of 90,000 men were collecting in Imbros and Lemnos. The forces round Chanak were therefore formed into the fifth Army under Marshal Liman von Sanders and were reinforced by one infantry division and one independent cavalry brigade.

The fifth Army of six divisions and one cavalry brigade was disposed in three groups, two divisions and the cavalry brigade round the Gulf of Saros, two divisions on the Asiatic shore and two divisions in the southern zone of the Peninsular. The total strength was 84,000.

THE DISEMBARKATION OF THE HOSTILE ARMY.

The first attempts of the hostile army to disembark on the coast took place on April 25th at three points, the west coast of the Peninsular, Sed-el-Bahr and Kum Kala.

1. A British force of one brigade, which came ashore near Ari Burnu on the west coast of the Peninsular, pushed aside our weak advanced troops, about one battalion, and in its first attack advanced some one and a half miles. But our reserves from Maidos came up and forced the enemy back to the sea coast where they were able to hold on under the fire of the ships' guns. Our attacks during the night could make no progress and the enemy's offensive next day with reinforcements which landed in the darkness effected nothing.

2. The disembarkations carried out at five points on the Sed-el-Bahr front were fruitless for a time, thanks to the great efforts of our protective troops, but the enemy were able to cling to some of the coast. Reinforced during the night, they began to advance next day and were only stopped just short of Krithia.

3. The French, who had disembarked at Kum Kala, withdrew after two days' heavy fighting.

In these two days' fighting our losses were 3,627.

THE FIGHTING AT ARI BUENU.

The 19th Division on this front was reinforced on the morning of April 27th and passed to the offensive. The fighting continued during the whole day and into the night, but though the enemy was driven back, he was not forced into the sea. A hostile counter-attack next day accomplished little.

Our forces on this front which numbered 18,000, including reinforcements which they received up to May 1st, carried out a heavy attack on the enemy's centre on the morning of that day. Though the movement was executed with the utmost gallantry, no appreciable advantage was gained by evening. A hostile counter-attack under heavy supporting fire from the sea was repulsed.

In these continuous attacks and counter-attacks we lost 199 officers and 13,955 men. The enemy lost 8,000 in all.

THE SED-EL-BAHR FRONT.

On the 28th April the enemy attacked under cover of the ships' guns and were able to make a substantial advance. They were finally forced back to their original positions by our counter-attacks.

THE NIGHT ATTACKS.

The Fifth Army had now decided to drive out the enemy by night attacks owing to the destructive effect of the naval guns, and the front was gradually reinforced up to 17,000 men by May 2nd. During the next two nights repeated attacks were carried out, but we could not force the enemy off the land. Any gains during the night were lost in daylight through gun-fire and enemy counter-attacks. As an instance of our losses in these violent struggles let it suffice to state that the 15th Division lost 3,000 men in one night. The British had lost 13,979 on this front from the beginning of the operation.

The Army Commander, who now realised that it was impossible to drive back the enemy by offensive action, had to content himself with holding on to his position.

THE SECOND ATTACK ON KRITHIA.

Meanwhile Sir Ian Hamilton had gradually reinforced the Sed-el-Bahr front and on May 6th he launched an offensive towards Krithia. The attack continued without cessation for three days, supported by heavy fire from the ships, but in spite of heavy losses no success was achieved.

THE ATTACK AT ARI BURNU, MAY 20TH.

Under the orders of the Commander-in-Chief, Enver Pasha, the Northern Group, which had been reinforced by two divisions, began an offensive against the enemy before dawn on May 20th. The weight of this attack, which was made in dense lines on a front of $1\frac{1}{2}$ —2 miles by four divisions numbering 47,000 men, was directed against the centre of the enemy's line. The attack lasted till sunrise. Though part of the opposing trenches were captured the Turks were driven out by counter-attacks and the terrific fire of the naval guns. This offensive cost us 10,000 men and we were obliged to make an armistice to collect the dead and wounded.

THE THIRD ATTACK OF KRITHIA, JUNE 4TH—6TH.

To oppose this attack of the Anglo-French Army with some 53,000 men we had nearly twenty-four battalions including the reserves which had arrived. The naval guns bombarded our front till noon. Many of our trenches were destroyed and a large number of the defenders were killed and wounded. Many indeed were buried alive. The enemy infantry then advanced to the attack with the greatest determination and gained a considerable distance, reaching to our third position. Though the defenders were able to retake this line by a counter-attack, they failed in their efforts on the other two. A night attack on the British trenches was of no avail.

A further attack by the enemy on the 5th gained nothing. On the morning of the 6th the defenders had their opportunity. An attack was launched at 3-30 A.M. and all lost ground was retaken.

This severe fighting cost us 9,000 men, the enemy losing 8,000 in the last two days alone.

THE ENEMY'S ATTACKS OF JUNE 21ST—28TH.

Once again the British on the east of the Sed-el-Bahr front attacked after a heavy bombardment. They succeeded in capturing part of our front and pushed eastwards. But our reinforcements came up and stopped further progress. Our counter-attacks during the night were repulsed with heavy loss and our offensive next day, the 22nd, and again on the 23rd gained nothing.

Realising that the enemy had dangerously penetrated the right flank of the southern group, the Army Commander reinforced the latter by two divisions (15,000) from other fronts, and launched an attack on the morning of June 26th. Numerous assaults were carried out till noon of 26th June, with no result owing to the scarcity of our artillery ammunition.

These operations cost us nearly 16,000 casualties, the 3rd and 5th Divisions losing 4,991 and the remaining divisions of the group 10,858.

This battle which has passed into our history as the Battle of Zighin Dere, was the most costly engagement in the whole Dardanelles campaign.

After the battle it was decided to relieve the divisions on this front, which had been very severely handled, by units from the Second Army, *i.e.*, the 5th and XIV Corps, composed of four divisions. But before the relief was fully carried out, the enemy launched another offensive.

THE ENEMY'S NEW PLAN OF ATTACK.

After the last somewhat fruitless fighting, the British Government, at Sir Ian Hamilton's urgent request, sent out two fresh corps of five divisions. The latter would be fully concentrated at the front by the end of July. The Commander-in-Chief's plan was to reinforce the Ari Burnu front, attack the Turkish right flank at

Cunuk Bairi and Koja Chaman towards Maidos and cut our lines of communication to the capital. Demonstrations were to be made on the other fronts to attract the attention of the defenders and another disembarkation was to be carried out at Suvla on 6th and 7th August.

At this time the situation of the opposing forces was as follows :—

FIFTH ARMY.

Saros Zone.—Three infantry divisions and one cavalry brigade.

Ari Burnn Zone.—2 gendarme battalions, two Nizam battalions and one cavalry regiment.

Ari Burnn Front.—First line 3 divisions, Reserve 1 division opposed to 5 enemy divisions and four dismounted brigades

Sed-el-Bahr Front.—First line 4 divisions, Reserve 2 divisions opposed to 4 divisions, 1 brigade and the naval brigade.

Asiatic Zone.—Three divisions.

According to these dispositions we had 16 divisions, 4 battalions and three cavalry regiments on the Chanak front of a total strength of 258,000 men (167,000, combatants). We may estimate the enemy at 215,000, including 75,000 disembarked on the Anatarta front.

THE FIGHTING AT SED-EL-BAHR, AUGUST 6TH—7TH.

The enemy who had lost the small advantage they had gained in the first day's attacks owing to our counter offensive, once more advanced on the 25th. Any gains were very quickly lost. But the enemy were not content to remain inactive and in seven days lost 7,510 men.

THE FIGHTING ON THE LEFT FLANK OF THE NORTHERN GROUP.

The British launched a series of attacks against the left flank of this group from 6th to 10th August. Those of the 7th and 8th were very violent and costly and as a result the enemy captured

our first line trenches. The character of the fighting can be imagined from the fact that the 16th division lost 6,930 men in five days.

THE FIGHTING AT CHUNUK BAIRI.

Chunuk Bairi, which was the key to the right flank of the Northern Group, was the scene of very severe fighting on the same day. Out of the 38,000 men which the enemy had on this front, nearly 20,000 were directed on this point.

This offensive which was launched with unprecedented violence was able to make great progress during the first few days up to the evening of 8th August. Chunuk Bairi and the immediate neighbourhood passed into the hands of the enemy. The position of the Northern Group became most critical and counter-attacks delivered by night and day could not recover what we had lost.

At last on 9th August Mustapha Kemal Pasha, whose fine leading on the Anafarta front gave a measure of confidence both to the army and the terrified and panic stricken capital, was called to the Chunuk Bairi front as a last resort. On the morning of the 9th an attack was carried out by the three regiments. The hill was taken, the attack pushed up to the western slopes and the situation partially restored. Subsequent efforts failed to drive the enemy further back and the fighting died down.

THE DISEMBARKATION OPPOSITE ANAFARTA.

According to plan the enemy began to disembark at Suvla Bay on the night of 6th—7th August and by morning three brigades had been put ashore and the heights to the east captured. The one and a half battalions of gendarmes which were observing this front put up very little resistance.

The Fifth Army Commander, who, in spite of the representations of Isaad Pasha, commanding the Northern Group, did not believe that a landing would be made in this area, had of course

located very small numbers there. Consequently the enemy were able to gain ground with great ease. Owing to this lack of foresight two divisions were called up from Bulair by forced marches, but arrived too late. The 7th and 12th Divisions which were the first to arrive had to march 15 to 17 miles a day in very hot weather and were very exhausted. Thus our counter-attacks could not be launched before the 9th.

THE FIRST BATTLE OF ANAFARTA.

Early on the morning of the 9th, the 7th and 12th Divisions began the advance and before long bumped up against the enemy who were also attacking. We managed to force the British back to the last line of hills on the coast but could do no more. Subsequent attacks later in the day and on the 10th achieved no further advantage. A hostile attack on Kutchuk Anafarta on the 12th was repulsed.

The enemy had employed about 30,000 men in four divisions on this front against our three divisions.

THE SECOND BATTLE OF ANAFARTA.

General De Lisle, the new British commander on this front, next decided to attack our left flank and centre and occupy Kirish Tepe and Sulajik with two divisions while the remainder carried out the main attack on both sides of the Anafarta Irmak. The attack was launched on 21st August after a heavy bombardment by sea and land and after two days fighting in which the defenders showed the utmost heroism, the enemy had little to show. On the other fronts any gains by the British were quickly lost to them by our counter-attacks.

A week later the enemy made one last attempt. When this proved fruitless he evidently gave up all idea of the offensive. Until the evacuation the subsequent operations were confined to trench warfare.

THE FINAL PHASE.

After the failure of the attack at Suvla Bay, four divisions were sent out from France under Sarrail and two from England to carry out an attack on the French front. But at this time the advent of Bulgaria into the war on the side of the Central Powers and the commencement of the great offensive by the German and Austrian Armies against Serbia, attracted the attention of the Entente Powers to the Balkans. It was recognised that assistance must be given to Serbia and that therefore the Gallipoli Campaign must be abandoned. Sir Charles Munro and Lord Kitchener, who were sent one after another to report on the Chanak Front, decided that evacuation was desirable, and the Entente finally gave its consent.

The plan of evacuation was to retire from Suvla and Ari Burnu first and hold on to Sed-el-Bahr. In order to cover the retirement an attack was to be made on 20th December while the former fronts were to be evacuated on 21st and 22nd December. Finally the Entente decided to evacuate Sed-el-Bahr, and on January 8th an end was put to this bloody drama by the total withdrawal of the enemy.

The campaign had lasted 259 days from the day of the first bombardment in February. Our forces on the front reached their highest figure in September—310,000 men. Our losses were as follows:—

Killed	...	...	56,127
Wounded	...	...	100,177
Missing	...	...	10,067
Died of disease	...	...	21,498
			<hr/>
Total	...	...	187,869
			<hr/>

*Notes.**Notes by translator.—*

British casualties according to official sources :—

Killed, etc.	33,506
Wounded	78,394
Missing	7,623
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Total	119,523
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The total French losses according to French publications :—
115,000

Total Allied losses :—

234,523

The Anglo-French naval losses were :—

Gavlois, Suffren, Charlemagne and Inflexible were badly damaged.

Bouvet, Irresistible and Ocean were sunk with little loss to the personnel.

THE CHARACTER OF LIMAN VON SANDERS.

“Liman von Sanders’ memoirs show that he did not have a very happy time in Turkey. His surly temperament caused trouble immediately he came to the country. The large majority of Germans did not find in him a lovable nor an attractive personality. They merely disliked him. He regarded Enver Pasha as his rival. Any German who was seen to mix with Enver’s entourage was looked upon by him as an enemy. The German military attaché, General von Lusoff, and General von Brunsart, the German representative at Turkish G. H. Q were the two most important personages whom he ignored. Thus his general attitude in Turkey was the cause of a good deal of friction and unpleasantness.

As for the Turks, among those who knew him well there were some who liked and some who disliked him. But all are agreed on one point. Liman von Sanders was a man of mediocre intelligence and competence, a dour and hard German general.

At Chanak Kala Turkish arms and Turkish bravery overcame a very stout enemy for him. His strategy at the beginning of the campaign, indeed right up to the very end, cannot be looked upon as clear or consistent. He is accused of ordering unnecessary attacks against a superior enemy, posted securely behind wire entanglements.....

Liman von Sanders' final command was the Yilderim Group of armies. In this sphere of activity he neglected to conduct an elastic defensive policy, nor did he adopt Falkenhayn's system. No doubt he was unfortunate in having very weak troops, but by putting all he had in the front line and keeping no reserves, he only made his position the worse."

Extract from the preface of the Turkish edition of *Liman von Sanders*'.

"Five Years in Turkey."

THE EVOLUTION AND EMPLOYMENT OF "SIGNALS."

By Captain W. R. C. Penney, M.C., General Staff, A. H. Q.

Evolution is a bold word usually associated with probing deep into the scientific history of a species. The object of this paper, however, is not to trace the descent of the *genus* signaller from any remote origin. The title, perhaps, is therefore ill chosen but the communication services have recently grown into a considerable body and the history of that growth is interesting and instructive not only to the specialist but to all students of the military art. The organisation of any communication system is peculiarly dependent on the tactical dispositions of the various arms and consequently anyone controlling such a system is automatically brought into intimate contact with general military matters. My intention is very briefly to outline the development of signals and to remark on modern principles rather than to describe obsolete methods. Regimental signalling and the communication services of higher formations have purposely been treated together, as the more they work in with one another the better it is for both.

Apart from the introduction of modern apparatus, the essential difference in the principles and methods of providing signal communication between pre and post-war days is the change from a system which was always struggling with an object in view but which was rather shapeless and vague as to ways and means, to one which, based throughout on a Main Artery, at once draws everything into line and points a clear finger in the direction of co-ordinated progress. This change applies as much to organisation and general development as to actual methods in the field.

Before the war there were a number of signal units which were part and parcel of the parent corps of Royal Engineers. At the War Office—the course of essential development is taken from

Home—control was carried out by the Royal Engineer Sections of the staff. Men belonged to the Royal Engineers and officers were drawn from all arms. Thus there was a heterogeneous collection of material with no governing body of its own and possessing no permanent nucleus. There was little or no connection between Regimental Signalling and the Army Signal Service and it was not until well on in the war that artillery forward communications came out of complete isolation and joined the common cause, while within the signal service itself there was nothing resembling that chain of command which is essential to the smooth working of any military machine.

The war meant an enormous and sudden increase on an unprecedented scale in all services. From 75 officers and 2,346 men in August 1914, the Signal Service grew to approximately 1,500 officers and 35,000 men in France alone at the armistice. Like the Flying Corps before it, the time had come for signals to be recognised as grown up, to break away from its parent corps and to strike out on its own. Hence the birth of the Royal Corps of Signals which now has its own section of the General Staff at the War Office, its own section of A. G.'s Branch and its representatives in Q. It has a permanent cadre of officers and men, by this means ensuring continuity of effort, and control of development and technical efficiency. Herein lies my Main Artery of Organisation. It may savour of Centralisation, the enemy of economy and efficiency, but it is sound co-ordination rather than centralisation. The healthy, sane human being has his limbs and faculties controlled by his brain, and in the same way must a service, particularly a technical service, be directed by some central governing body, if it is going to procure the best results in the best and most economical way.

In the case of the Regimental Signaller, the same process can be traced. In all new establishments it will be found that no longer are so many signallers allowed per company of infantry, section of artillery or squadron of cavalry but that they are all pooled in

Battalion, battery or Regimental Headquarters. Thus the signalling officer has in his own hands a body of trained men, whom he can employ where and how he thinks best to meet the situation of the moment.

To be successful when it comes to the point Regimental Signallers must work and play as a team, and once trained as soldiers, kept together and employed on signalling till it becomes second nature to them. In this connection it is interesting to note the controversy that is current whether Regimental Signallers should or should not be a part of the R. C. S. This is a point on which plenty of thought can profitably be spent. There are many reasons for and against the proposal. Personally I think that it is bound to come in time. In the first place it is illogical to create a technical corps and not to employ it on what it is admittedly one of the most difficult problems to solve, the problem of communications in the forward areas. Secondly, it was very clearly proved in the last war—and this applies equally to such men as machine gunners—that a constant supply of trained specialists is impossible unless a training organisation which is capable of rapid expansion exists. This would be available as part of the R. C. S. Thirdly, forward signalling can be expected to become more and more technical in nature, owing to the growing use of wireless, and training considerations again favour the argument. On the other hand sentiment is against it and Commanding Officers are afraid of losing control. Only by opportunity, trial and experience can such opposition be overcome. By making all forward signalling personnel R.C.S. you place a large share of the responsibility on the shoulders of the Officer in charge Divisional Signals and his subordinates, which to my mind, is right from the point of view of co-ordination and economy of resources. In these days of modern warfare a Commanding Officer to learn sufficient detail of every form of fighting in addition to such matters as signals, has his brain and his hands more than full, and unless a Commanding Officer takes more than a little interest and knows more than a little

about signalling, he not only cannot make the best use of the resources at his disposal but is likely to prevent his signalling officer from doing so. Therefore he must be relieved of part of the burden by giving him the knowledge that a whole specialist organisation is behind him to help. The type of unit visualised for a Division consists of headquarters, one communication company per Infantry Brigade and one for the Divisional Artillery. The organisation would be similar to that of the Divisional Engineers.

Thus as far as organisation is concerned, from a condition of affairs where effort radiated out in all directions with a comparatively small degree of control and co-ordination, we have at least attained a state where advance is along one solid controlled line, with offshoots at right angles from it, each offshoot serving a particular purpose shaped to one end, the consolidation and advance of the main line of effort. The Royal Corps of Signals is the main line with the offshoots of seconded and attached officers and in the forward parts the Regimental signallers of the fighting units.

Development in times of peace lies mainly in the invention and perfection of apparatus. I mentioned before that one of the greatest problems always in front of us is that of producing safe and reliable means of forward signalling. This problem is being tackled continuously. Our Main Artery of development lies in a policy laid down by the General Staff, considered technically by the R. E. Board and passed to the Signals Experimental Establishment at Woolwich for practical execution. There they are always working on new suggestions to add to the reliability and security of forward communications whether it be a wireless set for the internal communications of Battalions, a new signalling lamp, or a fresh design of telephone, and they are continually carrying out trials and tests in the hope of progressing a little way towards the solution of these difficulties. In addition other experimental work of a more technical nature is carried on at Woolwich, such as high speed wireless telegraphy, wireless telephony, compass stations, etc. So here again we

have co-ordinated effort along a definite line, with offshoots in the shape of individual ideas and suggestions all directed and controlled with a view to the continuation of the main line of advance.

So we come to the true Main Artery, the actual methods of providing signal communications in the field. Firstly what do we mean by the Main Artery in this connection? To quote Signal Training, Part VIII, "the Main Artery system is one possessing that simplicity of design without which waste, confusion and overworked personnel must surely result."

The requirements of a good system of communication are:—

1. Reliability.
2. Speed of transmission.
3. Simplicity.
4. Ability to meet, without confusion and with the minimum of extra labour and material, the demands involved in changes in the situation, sudden concentration of troops, guns, etc.

Experience has shown that the establishment of a system consisting of main signal centres connected with each other from front to rear and laterally is the only method which fulfills the above conditions."

In short, the Main Artery is a system evolved to render unnecessary the dissipation of men and material, to facilitate control, to simplify repairs, to save unnecessary movement to help supplies, and many other minor considerations which all lead to the provision of good communication and the ability to go on providing it without breakdown. For an example take a very simple case of a Brigade advancing. Along the main line of advance would be a cable route. At or near the forward end of this route would be the Brigade Forward Station, where an exchange would be installed. This forward station would be sited so as to be as near as possible

to the headquarters of the units of the brigade. If circumstances demanded it, Battalions, etc., would lay their short lines into this forward station and make common use of the cable route back. Similarly with visual. The Brigade would provide a central station, which would move, as far as the nature of the country permitted, up the main line of advance. This central visual station would communicate with as many of the units in the Brigade as possible and with Brigade and possibly Divisional Headquarters. Similarly a Battalion would provide a central station to work between its piquets or advanced troops, Battalion and Brigade Headquarters. Again in the case of wireless, a station would be erected at the Brigade Forward Station working back to Brigade Headquarters. When a move took place a third station would leapfrog the first and so continuous communication would be maintained. The same applies to Despatch Riders of all kinds who would work up and down the main line of advance to the forward station, whence units would collect by runner or mounted orderly.

It is, in fact, a system of signal centres, a series of telegraph and telephone offices, so placed as best to serve the formations concerned.

On the old system there would have been separate lines by different routes to the units of the Brigade, separate stations to their visual stations, etc., and more personnel and material would have been expended without the provision of equally efficient communication. In addition all elasticity would have been lost and the power to go on providing communication dissipated on account of exhaustion of personnel and material.

It was comparatively late in the war, at any rate in France, that the system was introduced in practice, partly owing to the fact that existing systems were working more or less satisfactorily although of an extravagant and obsolete type—it is always more difficult to effect a change than to start anew—and partly owing to

the particular requirements of position warfare. In the more open warfare of some of the campaigns on other fronts, circumstances led more naturally to the introduction of the new system, or at least something like it.

It was from the French, that some of the first illustrations of the value of the Main Artery system came. In 1918 the 34th Division was sent to the French Front south of Soissons to take part in their final effort of July 18th. The Division came completely under French control and had to take over a French system of communications. This was the Main Artery system itself. Lines and auxiliary means of communication were concentrated along one axis, not too close in detail to merit the reproach of having all eggs in one basket, but close enough to mean the conservation of personnel and material and to effect mutual aid. It answered the purpose admirably and instead of there being a totally exhausted signal company in 2 or 3 days as so often happened when there were lines radiating out in all directions and despatch rider routes and visual chains all over the country, "Signals" were able to go on providing reasonably efficient communication.

From that time, with one lapse, we, the 34th Divisional Signal company, stuck to the Main Artery. The lapse occurred in our cable system during the preparations for an attack on Gheluwe in the Menin sector of the Ypres front immediately prior to the move forward which culminated in the Armistice. Divisional Headquarters were in the canal bank at Hollebeke and we had two Brigades in the line. Our main route was taken up more or less straight to the front. Fairly far forward on our left flank was a German metalled road and a conveniently situated pillbox. The temptation was too great, and we established a D. R. route and laid out an auxiliary cable line *via* our left flank, both of which made a considerable detour before reaching the Brigade concerned. The D. R. route was useful, mounted orderlies being employed over the broken ground and motor-cyclists

on the road, but the cable, the only one away from the main route proved a positive curse and was a source of great waste of energy. It was continually broken and we had to keep a comparatively large staff of linemen employed on it alone. The main route, on the other hand, although frequently broken was always quickly repaired owing to the concentration of our resources. When we advanced the single line was totally useless and was abandoned while the main route was easily extended by different parties working different sections. This main route ran from Division *vid* Brigades to as near to the front line as we could approach. The battalion which happened to be served by the Divisional route had the advantage of the comparatively heavy cable which had been laid with a view to future use.

Now, signal communications serve the headquarters of formations and unless the siting of headquarters follows a definite principle it is impossible for the Signal Officer concerned to work on a definite system. The "book of rules" for the Army is Field Service Regulations and if we turn to this we find two sections of primary importance to signals—Sections 107 and 163—the former in the chapter on "General considerations for Battle" and the latter in that dealing with the attack in Position Warfare. Section 107, which is headed "Position of Commanders" reads:—

"The headquarters of an attacking unit must be established well forward from the beginning of the battle, and must be moved forward by bounds in order to keep in touch with the troops as they advance. The commander in a defensive action must also establish his headquarters in such a position from which he can watch the progress of the fight and keep in touch with his troop and must be prepared to move forward to new headquarters when the offensive is assumed and his troops advance.

Good means of inter-communication are necessary for the successful direction of operations. Therefore unless it is necessary for him to intervene personally in the conduct of battle, A COMMANDER SHOULD ONLY MOVE HIS HEADQUARTERS WHEN

HE IS NO LONGER ABLE TO KEEP IN TOUCH WITH HIS SUBORDINATE COMMANDERS FROM HIS ORIGINAL POSITION. The higher the formation, the distance covered at each move will be greater in comparison with the headquarters of lower formations.

In order to simplify intercommunication, particularly in moving warfare it will be often advisable that the headquarters of Divisions, Infantry Brigades or Battalions should be grouped.

In the same way in an advance or retirement, communications are simplified if formations move up or down one axis of communication and occupy successively the same headquarters.

To insure that intimate co-operation between the infantry and their supporting artillery, which is essential to success, it is necessary that their respective headquarters should if possible, adjoin."

This lays down a principle which, if adhered to, allows the Signal Officer concerned, the opportunity and scope to develop his communications on a Main Artery basis.

Section 163 states :—" Construction of Headquarters. The headquarters of formations or units in the attack must be as far forward as conditions permit. They should be chosen with a view to the **FACILITIES AFFORDED FOR INTERCOMMUNICATION** and should usually be in the vicinity of intelligence posts. They should provide sufficient accommodation for the liaison officers from other formations or units and for signal service personnel, runners, etc.," thus affording to the signal service that consideration, without which, they cannot supply or maintain an efficient system of intercommunication.

This choosing of headquarters serves as one of the many examples of the close co-operation that is essential between signal officers and the commander and staff of the formation or unit to which they belong.

With regard to F. S. R., it is hoped that a chapter will shortly be added dealing entirely with communications. The present Vol. II has little reference to signals and the manual on the subject contains a mass of detail unnecessary to the non-signal officer and is a most difficult book to digest.

In considering the Main Artery one is very apt to think of it as a cable route and cable route only. This is to be avoided. When planning a system every form of communication likely to be at your disposal must be borne in mind. Never rely on any one means alone. As far as regimental signalling is concerned the means likely to be available are telegraph and telephone, visual runner and signalling to aircraft. Taking these in turn the following is a brief examination of their individual characteristics and value. Telephone and telegraph are grouped together because they both demand cable. The provision of cable communication in any kind of moving warfare is problematical. It is laid down that "in encounter operations telephone communication must of necessity be very limited." "If it exists at all" might well be added. What happens is this. A unit marches for a couple of days unopposed and visual supplies all needs. It comes up against slight opposition and a local attack is arranged. A telephone line or two are laid out and afford excellent communication. The enemy in front gives way and at the same time the commander of the column receives information of a large enemy force in the neighbourhood. He decides either to attack at once or to take up a defensive position. In both cases the action would be of a more or less serious nature and an intercommunication system is necessary. The signal officer is hampered throughout by having to reel up the lines he laid for the small local action, which might have been fought just as well without the telephone, or else the unit has left the ground and the cable is lost. This illustration simply serves as an example to bring out the necessity for sound judgment, appreciation of the situation and above all the possession of full information as to the dispositions of the moment and the possibilities and intentions of the future.

As far as the gunners are concerned, I have often been told that the telephone is essential to observation of fire, but have also been assured and have seen for myself that visual can and does take the telephone's place. If it is easy to lay out a line and it is certain that it can be reeled up again, by all means let cable be used but not without weighing up every consideration for and against. Cable is heavy and the supply limited and constant replenishment of stocks is absolutely out of the question. An illustration occurred during a practice rearguard action, the rearguard, consisting of one brigade. We fought a series of minor battles and there were many arguments whether cable should be laid out or not, gunners being particularly anxious to do so. We were not being hard pressed and alternative means proved ample. It was excellent visual country and suitable for mounted orderly. One night we were suddenly ordered to retire as quickly as possible to the main line of defence which was to be held at all costs. I went back to reconnoitre for a signal system and was met by the officer, i/c Divisional Signals, whose first words were, "I hope your cable is intact, as I have no more to give you." Even if it had been possible to reel up any lines that had been laid out, there would have been great delay in getting it back and relaid in the new position, where in view of the intentions of the commander to make a stand, a complete signal system was essential. Incidentally my section would have been exhausted. Cable therefore must be retained until a telephone system becomes imperative. To take an example of the other side of the question, when occupying an outpost position by night a limited telephone system is almost always necessary. Every case must be judged on its merits, a wary eye being kept on future requirements. It is not the ultimate responsibility of the signal officer to decide whether cable is to be laid out or not, but he must be in a position to advise and to advise quickly. It must be remembered that the good signal officer always has something up his sleeve.

The next means we have to consider is Visual, and in visual lies the most important part of regimental signalling. The different methods available are Flag, Lamp, Helio and Shutter.

In Eastern countries the principal among these are the Helio by day and the Lamp by night. The success of visual signalling depends entirely on a very high standard of efficiency, individual and collective. A man may be a perfect signaller individually but useless at getting a message through, which after all is the *raison d'être* of a signal service. On the other hand it is no use trying to work a station with personnel individually ill-trained. Therefore men must first be trained in what is known as "flag wagging," pure and simple, and then collectively as a machine, this being the basis of the system laid down in Signal Training, Part I. The strictest of discipline both military and technical must always be insisted on. Otherwise messages will not get through or if they do, they will be inaccurate. Before a visual chain can be worked stations must be sited and able to pick each other up and considerable practice in each of these points, especially on moving schemes, is essential. Stations must be sited to give the best field of vision plus the maximum amount of security. A visual system must be planned on the basis of one or more central stations according to the size of the area being dealt with, each central station being allotted part of that area, and made responsible for getting into touch with all subsidiary stations in their portion. The N.C. O.'s in charge must be given all the information possible as to stations they may expect to be in touch with and it must be impressed on all men that a visual station must never refuse a message even though it comes from a station which is unknown to them. The unknown station may represent a detachment in a tight Corner and the station picking it up may be its only possible outlet. For night working aligning marks on distant stations must be arranged beforehand. Aligment at night is a most difficult task particularly with the modern lamp of small dispersion. A central station may have to work to more outstations than they have lamps and fresh alignment may frequently be necessary. The pre-arranged mark precludes the necessity for going over the same ground every time a lamp has to be moved.

Visual in itself is not a difficult form of communication and is a most efficient one provided that signallers are thoroughly trained not only to work the various instruments but to pay minute attention to detail of procedure, to keep a sharp look out, and always be ready to assist other stations.

The personal factor plays a large part and if men have lived and played together for sometime, know each other well, and have developed *esprit de corps* the success of station work in the field is rendered very much more certain.

Runners come next on the list and this is undoubtedly the oldest and in some cases the most reliable form of communication there is. Little need be said on the subject as messengers and orderlies figure in every soldier's ordinary life, and runner is only another name for them. The signalling officer must, however, organise his system of runners just as much as any other form of communication, and must see that in peace time they are trained in simple map-reading ability to find their way about difficult country and in powers of observation generally.

There remains communication with aircraft. Lack of opportunity hinders the development of this branch of signalling in India but some work has been done with aeroplanes on the North-West Frontier. Success here again is dependent on co-operation and training. Pilots and observers must know and be accustomed to those with whom they are going to work, if any comprehensive system is to be evolved. Communication with the ground is officially still one of the duties of the contact aeroplane, but in the future it is probable that a separate machine called the communication aeroplane will come into being. The Popham or T panel, the standard means of signalling to aircraft, is not popular on the frontier probably due to lack of training and practice. Men working a panel must be very quick and must know and appreciate the difficulties of the man reading it. White strips have recently been issued to all platoons in

one area to ascertain if they meet requirements in indicating to aircraft the position of troops, and a new invention of the R. A. F. called a Director Arrow which is intended to take the place of the T panel, is also being experimented with. When wireless becomes more universal it will undoubtedly become the standard form of communication with aeroplanes.

This means of communication requires developing and the only way to do so is by personal liaison and continual practice the facilities for which, unfortunately, do not exist generally in India on an adequate scale.

All these means at the disposal of the Signal Officer must be considered in formulating his signal plan, and the best possible use made of each. He may have other auxiliaries such as wireless and pigeons allotted to him and they must be similarly organised to take their proper place in the machinery of his system.

To make their path smooth and to ensure success Signal Officers of any unit or formation must bear in mind the following points:—

1. Remember the two objects of an intercommunication system—

(a) to disseminate orders ;

(b) to collect information ;

(b) can be just as important as (a) and this is frequently forgotten by Regimental officers, particularly junior ones, who do not realise that they are merely part of a machine, the controller of which must know how its component parts are faring.

2. Always emphasise the importance in your own work and in that of your Subordinates of meticulous attention to detail in organisation and procedure.

3. Train your men on a mobile warfare basis, *i.e.*, make your schemes moving ones. It is the most difficult part of signalling and quite the most useful and interesting.

4. Always keep a reserve of signallers and try to do the same in the case of material.

5. Be on the best of terms with your commander and his staff. You are dependent on them for information as to what is going to happen and they are dependent on you for information as to what you can or cannot provide for them. You must become part of their headquarter organisation in practice and not in name alone.

6. Never quarrel on a technical detail, which breaches signal regulations. Send the message first and point out the mistake afterwards.

7. Bear in mind the value of reconnaissance and develop what might be called a Visual eye, coupled with quick decision.

8. If a regimental signalling officer, do not look on the Royal Corps of Signals as something quite apart. Both organisations exist for the same purpose and can help or hinder each other to a large extent.

In conclusion a few remarks as to the future. It is impossible to predict in detail but one can try to form a general idea of the lines along which progress will be made.

For the "normal" wars of the future, *i.e.*, wars in which the opposing forces are not drawn up facing each other in deep trenches for months on end, we may picture cable forward of corps headquarter and visual communication between corps and brigade headquarters disappearing completely, their places being taken by wireless and despatch rider. This is a bold conception but without bold ideas progress will not be made and all present day practice is aimed at the adoption of this principle in field communication systems. A trial embodying these proposals was carried out recently at Aldershot and results, although holding out considerable promise, showed that wireless is as yet insufficiently advanced to satisfy all demands for communication in the zone under discussion. Wireless is entirely satisfactory when stationary sets are all that are required, but once in the field where we demand portability and that instruments should to a certain extent be fool-proof, we immediately have to contend with great difficulties. Another point that must always be remembered about wireless is

that, as a machine to deal with traffic, it suffers from the drawback of being liable to be read by a similarly tuned hostile instrument. Messages, therefore, have to be enciphered and this means considerable delay, increase of personnel and a disinclination on the part of the staff to make use of this form of transmission. All through the war wireless was regarded as a "gadget" surrounded by an air of mystery and like all animals we fight shy of anything we do not understand.

It is, however, evident that wireless will come into its own in time. It presents characteristics and advantages which when fully developed will satisfy the varying requirements of all forms of communication, forward and rear. Development is largely dependent on the commercial world, where the two factors essential to progress, money and competition, exist, and in the commercial world this progress is undoubtedly being made.

To outline the present capabilities of wireless, a few examples of actual working are quoted below. From these I hope you will be able to think out how this form of communication is, in time, going to help us out of our difficulties in the field. These examples will show that much progress has been made in the last few years, but that as yet the experimental stage has hardly been passed. As far as Army requirements are concerned it is only after satisfactory stationary sets have been produced that field instruments which must possess portability and reliability to a high degree can be proceeded with.

In large telegraph offices, where thousands of messages are dealt with daily, transmission is carried out by means of automatic instruments, which either permit several telegrams to be sent at the same time over one wire, or else work at a very high speed such as human hands could not reach or maintain. Wireless installations have now been more or less perfected which will do equivalent work, up to a speed of approximately 100 words per minute. Two sets of this type are working between Allershot and Cologne and although

the home end is at Aldershot, the key is worked in the Central Telegraph Office, London. This is the kind of set which will be required to deal with the volume of traffic which passes between Armies, G. H. Q., and the different bases. For corps work there is in India an army set of suitable pattern. During the negotiations at Kabul telegraph work from the mission to India was carried out by two such sets, one at Kabul and one at Peshawar. Now when land lines are down or congested, traffic from Waziristan to India is cleared by these wireless sets working between Tank and Rawalpindi. To go a little further down the scale trials have just been completed at home of the set which is intended for the internal work of Divisions. This is a set arranged for pack transport with a range of approximately 100 miles with 30 ft. masts. For the very forward work a smaller and lighter set still, is in process of evolution at Woolwich. This will be the instrument for the use of regimental signallers generally and it is hoped that this set will also be able to communicate with aircraft.

As examples of telephony in the civil world, all instructions from the Harbour master to the Light Ship at the mouth of the Mersey are transmitted by wireless telephone, this being the first commercial installation. In almost every home paper there is some article on broadcasting, which is leading thousands of amateurs to dip into wireless. Commercial firms are producing standard wireless telephony sets to meet varying requirements and to avoid the necessity of keeping continuous watch there has been invented a wireless bell which is rung in the same way as the ordinary telephone bell.

The picture of the future therefore includes wireless as its main feature and to this end technical research must work.

In the meantime we must maintain at a high standard of efficiency existing methods and use them in building up systems of intercommunication, the keynotes of which are simplicity, compactness and reliability.

THE CAVALRY DIVISION IN THE WAR OF THE FUTURE.

BY COLONEL FREIHERR VON WEITERSHAUSEN (TRANSLATED FROM THE
MILITAR-WOCHENBLATT OF 1ST JANUARY 1923).

By "Chalk".

The following remarks apply only to a cavalry division employed as an independent unit or as part of a larger cavalry formation. The duties of divisional cavalry will not differ much in the future from those which were experienced in the recent great war. On the other hand the functions of larger individual cavalry formations are continually changing as they have done since the days of Frederick the Great.

In those days their duties were confined to combat on the field of battle and this rôle remained unchanged throughout the Napoleonic era. Concentrated in great masses, they were used as a reserve which was hurled to the attack at the psychological moment and at the critical point in battle. Reconnaissance formed no part of their rôle.

The raids of Stuart in the American war of secession first demonstrated the immense value of cavalry for reconnaissance work and as a mobile arm for the execution of wide flanking operations. In the war of 1866 the great cavalry masses on both sides were reduced to almost complete inactivity by the development of fire-arms; Königgrätz provided the only example of the old-fashioned cavalry attack and even in this case the Austrian cavalry were unable to exert any serious influence on the result of the battle. The war of 1870 and '71 still affords isolated examples of massed cavalry attacks but here again decisive success was always frustrated by the enhanced firepower of small arms. Even von Bredow's magnificent charge at Mars la Tour only served to give the German infantry a

fleeting breathing space, although it is true that this was of considerable value in countering the attempted break through of the French. On the other hand the German cavalry in this war developed the art of reconnaissance very considerably and the handling of the 6th cavalry division by General von Schmidt may be quoted as an outstanding example.

In the Russo-Japanese War the Russians, owing largely to lack of proper training, were entirely unable to make any effective use of their huge cavalry masses while the Japanese cavalry was too weak numerically to carry out any operations of importance. It so happened therefore that the most recent experiences of warfare preceding the world war produced no cavalry developments of any note.

All nations started the great war with their cavalry trained on very similar lines. This training was in the main devoted to reconnaissance work and to the employment of shock action by cavalry masses. It very soon became evident, however, that the improvements in firearms, more particularly the introduction of automatic weapons, had greatly limited if not altogether upset all preconceived ideas regarding the functions of the mounted arm. The heavy casualties suffered by cavalry at the beginning of hostilities soon proved that the days of shock action on a large scale were definitely numbered. The peculiar conditions which so soon developed on the Western Front forced the bulk of our cavalry to give up their horses and fight on foot and it was only on the northern flank of our Eastern Front that cavalry combats on a big scale occurred. As far as reconnaissance was concerned the duties of cavalry were slowly but surely usurped by a new arm of the service.

We must once again reconstruct our ideas on the subject of cavalry in the future. Strategic reconnaissance will be undertaken entirely by the Air Force. Shock action is a relic of the past. The prehistoric lance must be scrapped. It can at the best only encourage a false use of cavalry.

In my opinion the functions of a cavalry division of the future will differ but little from those of its infantry counterpart. It must therefore be trained and organised on similar lines. The only difference between them will consist of the increased mobility conferred on the cavalry division by the legs of its mounts. A cavalry division or cavalry corps will provide an army commander with a mobile corps d'élite which he can employ at the critical juncture of a battle with great rapidity and with telling effect. It follows as a corollary that cavalry masses should no longer be found ahead of an army but should be in rear, under the direct control of the G. O. C. in Chief, as long as possible so that they may meet any unforeseen developments as and when they arise. The situation of our armies on the 5th September 1914 provides a good instance of what might have been achieved with cavalry properly equipped and judiciously handled. Paris formed the danger spot of our first Army. To meet this danger the Cavalry Groups of the 1st and 2nd Armies should have been posted about Crépy en Valois and south of it. The 3rd Army Cavalry Groups near Fère en Tardenois and the 4th A. C. G. about Mourmelon le Petit—all under the direct control of G. H. Q. suitably equipped in accordance with modern practice these cavalry formations would have provided a powerful and decisive reserve in the hands of G. H. Q.

A further rôle of the cavalry of the future should be the execution of raids on a large scale round the flanks and rear of an enemy on the lines of the exploits of General Stuart.

It follows that cavalry should be regarded not so much as cavalry but as mounted infantry and that their training and equipment should be modelled on that of the latter. Since their fire power and manpower in attack is greatly hampered by led horses they must receive an ample complement of auxiliary arms. The organisation of a cavalry division of the future should in my opinion be somewhat as follows:—

3 Cavalry Brigades.

2 Battalions Infantry in motor lorries.

- 3 Btys. Field Guns.
- 3 Btys. Field Hows.
- 2 Btys. heavy Field Guns (10 cm).
- 3 Btys. heavy Field Hows. (5·9").
- 1 Coy. Pioneers on bicycles.
- 1 Coy. Pioneers on lorries.
- 1 Divnl. Bridging Train.
- 1 Reconnaissance Squadron Air Force.
- 1 Bombing Squadron Air Force.
- 1 Artillery Squadron Air Force.
- 1 Light Tank Detachment.

Of the heavy Field Gun Btys. one should be Horse drawn and one Tractor drawn. Of the heavy Field How. Btys. two should be Horse drawn and one Tractor drawn. The whole of the Field Arty. detachments should be mounted except two layers at each gun who should ride on the limbers. This will ensure them as far as possible against fatigue and will enable them to conserve their energies for the highly specialised duties of a gun layer in modern warfare. The heavy Btys. must be capable of manœuvring at a trot. The whole first line transport must be capable of carrying out extended movements at a trot. The auxiliary services should be provided with both horse drawn and motor transport so as to ensure against failure of petrol supply.

NOTE BY THE TRANSLATOR.

It appears improbable that the author has calculated either the financial effect or the roadspace of the heterogeneous cavalry division which he recommends in his conclusion.

It is equally doubtful if the Great German General Staff (or what is left of it) will ever take the trouble to do so. It would also be, to say the least of it, interesting to see a horse drawn 5·9' How. Bty. manœuvring at a trot.

On the other hand the author must be congratulated on boldly enunciating the theory that the days of cavalry as such are numbered, without obscuring his case with the stock arguments of the tank mono-maniacs who form at the moment the chief supporters of this doctrine.

REGIMENTAL SPIRIT IN THE INDIAN INFANTRY.

By "Chameleon."

The organisation of the Indian Infantry into regiments of more than one battalion is nothing new, for in the brief histories of the various battalions placed below their names in the Indian Army List it will be seen that from 1796 to 1824 the Indian Infantry was organised into regiments of two battalions in each. I know, however, of no record which shows whether such regiments cultivated a regimental or a battalion spirit.

In 1824 it was reorganised into single battalion regiments, and this system continued until 1914, with the exception of the regiments of Gurkha and Garhwal Rifles, in each of which there were and are two battalions. When one of these single battalion regiments went on service it left behind a depôt from which drafts were sent to replace casualties.

This single battalion system gave birth to that strong battalion spirit, which "Regimental Officer" praised so much in his article named, "An aspect of the group system" in the January 1922, number of this Journal.

But, though the battalion spirit was undoubtedly very strong, yet there existed all the time a desire to be considered a part of a larger organisation than a battalion, and a group spirit of varying strength grew up in the Frontier force, the Sikh, Dogra and Gurkha "Brigades," the Baluch and Baluchistan battalions, the Hyderabad Contingent and in many Links, especially those composed of class battalions.

The battalion spirit, referred to above, also lost strength the lower down the scale of rank you went. It was a delicate plant carefully fostered by the British officers and was not so strong among

the Indian other ranks. "Regimental Officer" in his article says that the most numerous and valuable class of recruits is composed of men who "enlist in a specified unit because their relations and friends are already serving in it." As to the comparative value of different classes of recruits, opinions may differ, but my experience as a Recruiting Officer in the Punjab before the war and in a Training Battalion since the war does not bear out "Regimental Officer's" statement that this class is the most numerous. I found that recruits are usually obtained as follows. A young man is fired with a wish to see the world, or his family traditions teach him that Government service is the proper career for a man of his caste, or his father finds that he has more mouths to feed than he can manage and tells the potential recruit to get out and find a job; the young man then goes to the nearest unit enlisting his class, or to the Recruiting Officer and enlists, or else he attaches himself to a recruiter or soldier on leave and accompanies him to the Recruiting Officer or to the Training Battalion. His friend the old soldier diligently coaches the recruit as to the answers he is to give to the questions on the enrolment form and the recruit duly states that he wishes to enlist in a certain battalion "because his *bhais* are in it" generally meaning by *bhais* men of his own class. The experiment has lately been tried in one Training Battalion—not the one to which I have the honour to belong—of making close enquiries from recruits as to their wishes and the reasons for them, and it was found that only 2 per cent. had any marked predilection for one battalion over another.

There is no doubt that, as "Regimental Officer" says, the battalion spirit was the cause of great keenness in the pre-war army, but it was not altogether an unmixed blessing. In some battalions, more especially in class battalions, it took the form of considering the men enlisted in those battalions as being of superior social standing, and to emphasise this claim, stress was laid on the caste prejudices of the men, detrimental to efficiency though these

prejudices might be. There was also sometimes a tendency among units, specially favoured in the opportunities for active service, to belittle the value of others, who, owing to their location, had not the same privileges. The feeling that they were looked down on called out in answer a feeling of soreness and dislike among the less favoured towards the more favoured units.

As a result of the above the commencement of the Great War found the Indian Infantry, with the exception of the Gurkhas and Garwhalis, consisting of a number of fine but self-centred battalions, in which the British Officers had inculcated a spirit that, whereas other battalions of their own or similar composition were not bad yet their own battalion was incomparably the best, and that those not of their own or similar composition, or who happened to serve habitually in other parts of India, were either inherently inferior or underservedly overrated.

On the despatch of Indian Infantry battalions overseas in the various expeditionary forces these battalions for the first time got to know well troops from other parts of India, and to their mutual surprise found that in efficiency and fighting spirit there was little to choose, owing to the unforeseen scale of casualties the single battalion plus depôt system broke down, the bulk of the reserves were found unsuitable for modern war and battalions overseas had to be completed by drafts from battalions still in India. This resulted in battalions in India losing many of their best officers and men in drafts and in battalions overseas becoming to a greater or less degree conglomerations of officers and men drafted from a number of different battalions and imbued with different *esprits de bataillon*.

The end of the war found the Indian Infantry still working well though the battalions were composed largely of officers, who previously had had no connection with them, and of men, many of whom had been rapidly collected by the Recruiting Staff and had received a brief superficial training in depôts in India before being despatched as drafts to battalions of whom in many cases they had never heard.

“Regimental Officer” thinks that it was the old battalion spirit that pulled the Indian Infantry through the war and the first years of peace, but in view of the above I think that he must acknowledge that the single battalion plus 4 depôt system with its battalion spirits was proved to have been a failure in the Great War, though it worked well and gave good results in frontier expeditions and other “small wars.”

In 1921 came in the new organisation of Indian Infantry, other than Gurkhas, into regiments of from 3 to 7 active battalions and a training battalion; recruits are enlisted for the regiment and not for a battalion thus giving a larger pool in the training battalion from which to reinforce active battalions on service; and all the battle honours that have been or will be won by any one battalion of a regiment will be borne on the colours of every one of the battalions of that regiment. It is, I think, the duty of us, regimental officers, to accept the fact that the old single battalion system has gone and to teach all ranks to look on all men of their regiment as brothers, to rejoice in the exploits of any part of their regiment as shedding lustre on the whole and to sympathise with any losses as losses to the whole regiment to be made good as a regiment as a whole. We have an exceptional opportunity to do this for the old single battalions have dissolved in the furnace of war and a new battalion spirit has not yet had time to crystallise.

The proposal of “Regimental Officer” that each company of the training battalion should be earmarked exclusively for the battalion to which it is affiliated would perpetuate the single battalion plus depôt system, which failed, and would turn the training battalion, from being a unit, proud of the regiment to which it belongs and of its special duty of supplying drafts worthy of itself and its regiment, into a collection of semi-independent depôts with narrow *esprits de battalion* centred in battalions far away and devoid of sympathy with men of the same classes and districts in other companies alongside of them. The proposal would also entail a

divided allegiance among the officers and men of the training battalion for, though they would be working under the orders of the Officer Commanding the training battalion, they would be looking for approval to the officer commanding their active battalion; and the officers commanding the active battalions would be tempted to look on their affiliated companies in the training battalion as the fifth company of the active battalion and to interfere in the training battalion companies. This would undoubtedly have a bad effect on the uniformity of training in the training battalion and consequently of the whole regiment.

Again the future must be considered. An announcement has been made in the Legislative Assembly that the experiment is to be made of officering a number of units with picked Indian officers with a view to the eventual elimination of British officers in those units. No doubt the British officers in those units will do their best to teach the Indian officers under their charge to be ready, when their turn comes, to command efficiently. Similarly the Indian officers, if they are worth their salt, will do their best to make good under a system unfamiliar and perhaps unpalatable to many brought up under the present system. It would be of very great help to all officers of these selected units to feel themselves part of regiments, supported by the sympathy and goodwill of the other battalions of their regiments, rather than as members of lone battalions fighting hard to make good against possible prejudice and distrust.

In 1881 when Lord Cardwell was Secretary of State for War the British Infantry went through a reorganisation very similar to that through which the Indian Infantry has just gone. Territorial regiments of two regular battalions were formed, and these, in the case of units whose old regimental numbers were greater than 25, were formed by joining two single battalion regiments. Much the same objections were made then as are now made in the case of the Indian Infantry, but the result was proved to be excellent in the Great War. Not only was there no deterioration in the efficiency of the regular battalions by the introduction of a regimental spirit,

but fresh battalion after battalion was raised and was inspired by the spirit of the regiment as a whole.

Now let the Indian Infantry in its turn cease to bewail the dead single battalion system and let us work loyally and whole-heartedly to make the new system a success and, in addition to making every endeavour, as before, to make our own battalion the best in our regiment, do all in our power to make our regiment the best in the Indian Infantry, and the Indian Infantry as a whole as efficient as circumstances and financial stringency will permit.

A MATTER OF HISTORY.

It seems probable that the following letter which has been received by the United Service Institution of India refers to a piece of plate belonging to a unit of the old Madras Army which took part in the conquest of Jawa and Sumatra under Rollo Gillespie during the Napoleonic wars.

No order of battle of the force is traceable at present, so it is thought that regimental records may serve to establish the claim, and that the battalion concerned may care to approach the Chinese dealer through Mr. Jackson with a view to purchase.

Two battalions appear to be indicated:—

10th Battalion, 1st Punjab Regiment:—Raised in 1794 as
34th Battalion of
Madras Native
Infantry.

4th Battalion, 3rd Madras Regiment:—Raised in 1794 as
33rd Battalion of
Madras Native
Infantry.

Motto—"Now or Never."

The claims are conflicting. The most likely solution is that the 34th Madras N. I. also had the motto "Now or Never" which was subsequently dropped. In that case the plate clearly belongs to them—or rather to their successors the 10/1st Punjab Regiment.

Editor.

The Borneo Sumatra Handel Maatschappij.

PALEMBANG, SUMATRA, D. E. I.,

Dated 25th April, 1923.

To

O. C. TROOPS,

THE GARRISON,

SINGAPORE.

SIR,

I have the honour and take the liberty of writing you on a matter in connection with which you will probably be good enough to give me some information.

First as to myself, I am a Britisher, ex-Captain R. E.,—domiciled in Palembang and technical engineer to the above Company.

Secondly, I am interested in antiques, and in rummaging round an old Chinese second hand dealer's shop in Palembang, I came across a Candelabra which I am of opinion has at one time been the Mess property of an English Regiment. It is silver plated on copper, of obviously British manufacture, is fitted with eight branch arms and stands from 2' 6" to 3' 0" high. On the base is engraved a crest with the words: "Now or Never" and the number XXXIV.

It may originally have been in the Fort at Benkoelen during our occupation there, or probably Muntok, I don't know, and being mere conjecture, will you be good enough to inform me on the two following points:—

- (1) Can you enlighten me as to the Crest and express an opinion as to the origin of the Candelabra.
- (2) If it is regimental property or rather was originally, of which I am pretty certain, and presuming the Regiment still survives under another name, and further presuming it has not been "axed" in these days of frigid economy, then it is not improbable possession would be desired.

I have no concern whatever in its ownership or sale, being a Britisher anything of this kind interests me intensely as one finds so little these days to remind one of our previous occupation of this part of the East.

I will have a photograph taken of it if you desire, and put you in touch with the Chinese dealer.

The price he asked me was Guilders 150 which I noted without comment, preferring to wait until I knew more about it before arguing price.

My apology and excuse for writing you is my intense interest in anything connected with the Army and in stating this I know no further words are necessary.

I am,

SIR,

Your obedient servant,

(Sd.) JAMES W. JACKSON.

REVIEWS.

FOREIGN.

MILITAR-WOCHENBLATT.

15TH MARCH, 1923.

1. REGARDING THE MILITARY REPUTATION OF MARSHAL FOCH.

By General von Zwehl.

A discussion of the criticisms by the French General Fonville of Dewar and Boraston's claims as to the share of credit to be given to Lord Haig for the success of the final offensive in 1918. The verdict is that the French critic is so absorbed in his task of trying to glorify his hero Foch, that he loses all sense of proportion and is incapable of doing justice to anyone else who had a share in Foch's victory.

2. THE QUESTION OF THE "INFANTRY GUN."

The task of the 'infantry gun' is to assist the infantry from the outset of a battle in overcoming local opposition and in putting out of action hostile machine gun nests, tanks, etc. It must achieve its object from whatever position it can find, under cover or in the open as speedily as possible, before it draws the hostile artillery fire upon itself. For this reason and because of the difficulty of ammunition supply it is not capable of firing continuously and must withdraw to a fresh position as soon as its object is achieved.

An army like the German, which has to oppose hostile tanks, while having at its disposal neither tanks nor fighting aeroplanes of its own, must of necessity pay particular attention to the evolution of the most suitable weapon of this kind. The weapons considered suitable by other nations are not necessarily suitable to the particular needs of Germany. War experience has, however, shown that a gun of small calibre is not sufficiently effective, and the universal opinion is that a gun of at least 6½ c. m. is essential.

If it were possible to adopt a special anti-tank gun in addition to the 'infantry gun,' it would make the task of selecting the type for the latter much easier. But in the German army which is only permitted a small proportion of artillery, the provision of two separate types is out of the question. The qualities demanded of the one type which is to combine the duties of 'infantry gun' and anti-tank gun must therefore be:—

- (a) to be sufficiently effective against targets such as attacking troops, machine guns, tanks, etc., in so far as they can be dealt with by direct fire ;
- (b) to have an adequate ammunition supply ;
- (c) to possess great mobility and to be a difficult target to locate ;
- (d) to be capable of a high degree of accuracy ;
- (e) to be capable of a high rate of fire and of opening fire quickly ;
- (f) to be able to shoot from a concealed position.

3. NEWS FROM SOVIET RUSSIA.

By our Russian Correspondent.

The occupation of the Ruhr has called forth much comment in Russia and public opinion in that country is strongly on the side of Germany. Some of the Russian generals have expressed themselves in public as most anxious to march to her support, but that is a practical impossibility at the moment. All the same the Russian infantry and cavalry are good, possibly more efficient than in 1914. Both officers and men are more experienced and more self-reliant than was the case before the war, and nowadays the equipment, which was the weak point until recently, leaves little to be desired. The chief difficulties are horses and artillery. Guns are hardly ever to be seen in Russia, and the ammunition supply also is a serious problem. Indeed, for this reason Russia would find it impossible at present to carry on a war on a large scale.

4. TECHNICAL REVIEW.

By Hauptmann A. D. Polster.

A review of a number of technical articles appearing in German and foreign periodicals.

5. GERMAN TANKS DURING THE WORLD WAR.

A review of a brochure issued recently under the above title by an officer of the German Tank Corps. During the war the Germans missed their opportunities as far as tanks were concerned, and allowed the Allies to obtain a lead which they could never hope to overhaul. As a result the German tank never developed to any great extent, and at the end of the war the German army possessed only three detachments of tanks of German design and manufacture as against six of captured tanks. The book under review contains the story of the use to which this small force was put, and ideas as to the future employment of this arm.

MILITAR-WOCHENBLATT, No. 29.

1ST APRIL 1923.

1. THE FRENCH IN THE RUHR AND GERMANY.

By Lieut.-Genl. von Cramon.

A wail over the terrible oppression to which the innocent inhabitants of the Ruhr are subjected by the barbarous French. Germans are exhorted to stand firm against this French tyranny and to rely on their own powers of endurance to give them the victory in the present struggle. All other nations which might have helped Germany to solve the difficulty which now faces her are intent on turning matters to their own advantage, and no one need expect any assistance from them.

2. THE FRENCH RAILWAYS AT THE OUTBREAK OF WAR.

By Major Dr. Kretschmann.

An account in some detail of the use to which the various sections of the French railway system were put during the periods of mobilisation and concentration in 1914. The writer's verdict is that on the whole the railways carried out their task very satisfactorily.

3. THE PROBLEM OF THE "INFANTRY GUN."

A reply to the article by Hauptmann Pfeiffer which appeared in Issue No. 28 of the Militar Wochenblatt.

The author strongly advocates the use of a 3.7 c. m. gun in addition to the heavier weapon which was singled out in the previous article on this subject as the ideal "infantry gun" for German purposes. The former is the most suitable gun for dealing with machine gun nests, the latter for dealing with tanks. To provide a full complement of the latter would be impossibly expensive, and in addition not so satisfactory from a tactical point of view as a combination of the two types.

4. HOW IT IS DONE.

By Lieut.-Genl. H. Klotz.

The author, taking as his text a passage from a German Swiss journal which has been mistranslated in the "France militaire," declares that this is an example of how the French make a point of misconstruing anything and everything in order to provide themselves with proofs of their theory that Germany has rejuvenated her aspirations towards world empire.

5. THE HEAVY MACHINE GUN.

A short review of a supplement bearing this title which was recently issued by the *Militar-Wochenblatt*.

MILITAR-WOCHENBLATT, No. 30.

15TH APRIL 1923.

1. MILITARY AND POLITICAL NEWS FROM SOUTH-EAST EUROPE.

May to December 1922.

Czecho-Slovakia is nothing more or else than a vassal State of France. She has just completed a satisfactory reorganisation of her army with the help of a French military mission, and it is almost certain that this army will be used against Germany in the event of France deciding to demand further sanctions from Germany. Hostility to Germany and Hungary are the most marked features of Czecho-Slovakian relations with their neighbours. The Roumanian Army, though it has not attained a very high standard of efficiency, has nevertheless undoubtedly improved. Apparently plans have been worked out in detail for co-operation between it and the Polish army in the event of war with Russia. There has been little or no change of interest in Jugo-Slavia. The Austrian army is still too much under socialist influence to be of any great military value, and it has so far been found impossible to eliminate politics from it. The financial situation in Austria remains serious. The re-awakening of the national spirit in Hungary has had a marked effect on the army, which has reached a relatively high standard of efficiency, a fact which is noted with apprehension across the border in Czecho-Slovakia. In Bulgaria it has so far been found impossible to recruit the army by voluntary methods up to the strength allowed under the Peace Treaty.

2. THE SECOND ARTILLERY ADVANCE, PART I.

A discussion of the best method of ensuring the rapid bringing up of artillery for the second phase of a battle after the enemy's line has been broken, in order to prevent him from having time to reform in a second strongly prepared position.

3. THE ORGANISATION OF THE GERMAN ARMY IN THE WORLD WAR.

By General von Zuehl.

A review of a recently issued official work compiled under the above title by Hermann Cron. This is the first historical work of an official nature dealing with the German Army during the Great War, and it is a glowing tribute to its magnificent achievements.

RECENT BOOKS.

"SIR DOUGLAS HAIG'S COMMAND."

*By G. A. B. Dewar, assisted by Lieut.-Col. J. H. Boraston, C.B.,
published by Constable & Co., 1922. 2 Volumes. Price, 42/.*

The main object of this book is avowedly to show that in Sir Douglas Haig the Army and the Nation were fortunate in having a commander by whose character, loyalty to chiefs and subordinates alike, and military ability fostered by years of study, the war was carried to a successful conclusion. In the attainment of their object the authors have been completely successful.

Notwithstanding votes of thanks in Parliament, the award of honours, promotion and a monetary grant, full credit has never yet been given to Haig by the politicians, whom he served so loyally and faithfully and who have never hesitated to give all the credit to Foch, credit to which Foch himself has never laid claim. In fact, the authors show conclusively and clearly that our Commander-in-Chief in the field had others besides the German Army as his enemies. Enemies represented by a Government headed by a Prime Minister who, however able he may have been in organising the home front, was totally deficient of military ability when dealing with the strategy of the forces in the field and who in fact, while disapproving of the leadership in the field, did not possess the moral courage to make a change, but preferred to adopt the discreditable method of endeavouring to make the position of the Commander-in-Chief so difficult as to force him to resign, instead of issuing orders to that effect, which he knew would not receive the approval of the British public.

The book has two authors, the one to write the story of the operations, the other to make the comments. The work of both is equally satisfactory and convincing.

The story of fighting, written by Colonel Boraston whose appointment on the General staff at General Headquarters and subsequently as Private Secretary to the Commander-in-Chief gave him all the opportunities required to write an accurate account, though it is related in sufficient detail only to illustrate the strategy and plans of the Commander-in-Chief and to show to what extent they were carried out, is easy to read by anyone with a reasonable knowledge of the topography of the theatre of war. Without this knowledge many readers may be somewhat at a loss, as the sketch maps are insufficient by themselves and reference has to be made to the full series of maps published with Dent's edition of Haig's Despatches. This detracts to a certain extent from an otherwise excellent book, though it was no doubt enforced by the desirability of maintaining the cost of publication within reasonable limits. With the exception of the account of the fighting of the Fifth Army on the Ancre during the winter of 1916-17, the story of the operations is well balanced. The Ancre fighting consisted almost entirely of a series of minor tactical operations and it is difficult to appreciate the reason for a special chapter being allotted to this period, however successful the operations may have been, unless it is to extol the abilities of the Fifth Army Commander and so endeavour to vindicate the action of the Commander-in-Chief in retaining him in command at a later date when he had undoubtedly lost the confidence of the large majority of the fighting troops.

The chapters dealing with the negotiations with the French are clearly written, but the reader cannot but help feeling that in the authors' endeavour to ensure that Haig receives his due need of credit, they have, no doubt unintentionally, belittled the ability of the French Commanders, Joffre, Petain and Foch. Occasionally too one finds credit given to the British Commander-in-Chief for operations, for which the initiative was not his but that of his subordinate commanders.

In dealing with the relationship of the Commander-in-Chief with the French command, the authors have adopted a temperate

and judicial attitude. Unlike that used in some other well-known books by British authors, there is nothing in the language used which should offend the susceptibilities of our Allies, although they may dispute some of the conclusions reached. The authors have endeavoured to put their case fairly, for which the reader and the British Army has reason to be grateful.

Apart from the work entailed in drawing up plans for operations, the most burning and constant problem was that of deciding the proportion of the front to be held by British troops. During 1914, 1915 and early 1916, the predominant partner was undoubtedly the French. In the glamour which surrounded the operations in which our original expeditionary force was engaged, there has been a tendency not to give due credit to the French for the predominating part they played during the first half of the war. It was not unnatural for the French Command and French Government to wish us to take over more responsibilities, but they did not apparently realise, as they should have done, how infinitely more important strategically was the front held by British troops in Flanders, Artois and Picardy than the remainder of the front where there was adequate space for manœuvre. Neither did they realise that, after the disintegration of the French Army due to the failure of the Nivelle offensive in 1917, the British Army had in its turn become from an offensive point of view, if not in actual numbers, the predominant partner on the Western Front. It was impossible for it to retain the initiative on behalf of the Allies by mounting powerful offensives and to maintain the vital security of the narrow strip of terrain covering the Channel ports, while at the same time taking over more line and relieving French divisions. In the arguments used in the numerous discussions Haig showed a foresight for which it is hoped that our Allies are now adequately grateful. It is difficult to realise what would have been the outcome of the German offensive in March 1918, had the strength of our already inadequate forces been further attenuated by the extension of the British front as far as the Ailette. When the situation warranted it Haig never

hesitated to take over more line, as is evidenced by the speed with which the French Tenth Army was relieved from the Arras front early in March 1916, during the early days of the battle of Verdun.

The battle of the problem of the line, as it may not inaptly be called, rose to the height of its intensity during the winter of 1917-18 and though no fault can be found with the attitude and decisions of the Commander-in-Chief, it is a matter of regret that the same cannot be said of that of the British Government. It can scarcely be credited, though it is a well-known fact, that a government could place the Commander-in-Chief of its forces in the field in such an impossible position as one in which he found that the Government had agreed to an extension of the line, which was known to be contrary to his wishes and judgment, at a conference at which he was not present and without his knowledge. About this matter nothing more need be said except that it was fortunate that the extension agreed to was never carried out and that Haig did not take the course of resigning which many others with less devotion to their country might have done.

This, however, was not the only instance in which decisions affecting operations in the field were reached by the Government without the concurrence of the Commander-in-Chief. The most notorious case was that in which unbeknownst to either Haig or Robertson, the Chief of the Imperial General Staff and military adviser of the Government, it was mutually decided by the French and British Governments to appoint the French Commander-in-Chief (Nivelle) as Generalissimo—a radical change in the organisation of the command in field, which ended in the disintegration of the French Army and the crippling, though to a lesser extent, of the offensive power of our own Army. The experiment, costly though it may have been, taught the British Government a lesson and thenceforward, contrary though it may be to the general belief, the Prime Minister would have nothing to do with "unity of command." Many have attempted to take credit for the appointment of Foch in

1918 as Generalissimo, but the authors have buried once and for all the cannard that Lloyd George was in any way responsible. The credit for the appointment rests solely with Haig.

The problem of "unity of command" is dealt with very fully and the authors have added a valuable contribution to the discussions on the question. The chief point made, based on the experiences during the period of the Haig command, is that the possibility of advantage being obtained from unity of command rests solely on the personalities of the commanders concerned. Although on paper unity of command did not exist in 1916, actually between Joffre and Haig unity was complete and there should be little doubt after reading Ludendorff's appreciation of the situation at the end of 1916, that victory was within sight in 1917, had it not been for the decision which provided unity of command in name though discord in command in reality. It is easy to be wise after the event but it is difficult to realise how it was that the Allied Governments were bluffed, as bluffed they undoubtedly were, into the appointment as Generalissimo of a soldier without any credentials other than the successful accomplishment of some comparatively minor tactical operations at Verdun against an enemy whose fighting efficiency and moral had been sapped dry by the Somme, without reserves and without an adequate force of artillery at its disposal.

The situation and negotiations which preceded the appointment of Foch in 1918 should be carefully read. The appointment was a success because both Haig and Foch had the same aims and were imbued with the same fighting spirit. As mentioned above, the responsibility for his appointment rests with Haig, who learning on March 24th, that Petain had given orders for the French Army to desert their British confreres and to fall back south-westwards to cover Paris, realised that these orders spelt disaster to the Allied cause. An elementary acquaintance with the principles of strategy should have sufficed to foresee the result of this order and it was apparent at once to Haig that, if the Allies were not to be defeated

in detail, some one with a knowledge of those principles, with imagination and with a dogged fighting spirit, must be placed in supreme command in order to countermand without a moment's delay the 'sauve qui pent' orders given by Petain and to force the French to fight, thus maintaining the integrity of the Allied line. To accomplish this, the choice had perforce to fall on a Frenchman and the only Frenchman, who could carry out the task, was Foch.

Of the Versailles Council, its origin, functions and activities much is said though little that is new. The subject need not be dealt with in this review other than to say that the authors completely vindicate the attitude to it of the British Commander-in-Chief and give the lie direct to the allegations that have been irresponsibly made that a plot was hatched between Haig and Petain in order to nullify the proposals of the Supreme War Council as regards the formation of a General Reserve.

The impression left on many people's minds both during and after the war that the strategy of our higher command was lacking in imagination is shown to be incorrect. The strategy adopted by Haig was dictated by the situation akin to siege warfare into which the fighting had resolved itself and has been proved by the writings of Ludendorff and other German writers to have been correct. In fact Haig saw the war in its true perspective. He realised that after the failure to obtain a decision in the opening phase of the war and after the battle line had become stable without flanks against which to manœuvre, the only strategy to adopt was that of weaning down the enemy's strength and moral. As soon as that object had been obtained, as it was in the summer of 1918, nothing could have been more brilliant than the skill with which he manœuvred his armies, and while history will assuredly at length record the fact that the deciding factor in the final campaign was the fighting efficiency of the British Armies, it will equally give credit to Haig for the imagination he used in handling the forces at his disposal. Differences arose between himself and Foch

from time to time as regards the plan of operations. In cases, Haig disagreed totally and forcefully from Foch and results show that he was correct in doing so. Unless they had both been inspired by the same spirit, chaos would have arisen and discord instead of unity have resulted. It is equally to the credit of both that each knew how to give way when compromise was necessary and how to maintain their opinion (even to the extent of a definite refusal on the part of Haig) when they felt it impossible to agree.

How difficult was Haig's task, even had he had a loyal backing by the Government, the book clearly shows us. How much more difficult it was made through the Government's disloyalty to him many incidents show. It is difficult to write in restrained terms about the telegram sent to Haig on August 31st, 1918, when he was preparing for the decisive operation against the Hindenburg Line, indicating to him that the Government would view with disfavour any failure in the offensive which might incur heavy casualties. It is a pity that the message is not quoted verbatim and that we are not told by whom it was actually sent. It is only noted as being a "personal" message. Fortunately Haig treated it with deserved contempt and never swerved from his determination to defeat the enemy when he had the chance even though failure to do so would have incurred the displeasure of the Government and his displacement from command in the hour of victory.

Few soldiers in the fighting line could know or realise the responsibility and anxieties of their Commander-in-Chief. The Army could not possibly know him as the Armies of past ages had known their commanders, commanders such as Wellington, Napoleon, Frederick the Great, Roberts, Wolseley and others. This would have been impossible in any Army of the size to which the armies expanded between 1914 and 1918. This book, in addition to all else, helps us to know him.

Of Haig's chief characteristics as a commander the most outstanding were his trust in his cause, his imperturbability and determination, his loyalty to his superiors, his loyalty to his subordinates, and finally his ever present optimism. By those who served directly under him both before and during the war it is said that his unvariable motto was "Aim high, perchance ye may attain." To quote the poet Wordsworth he was "a man of cheerful yesterdays and confident to-morrows."

We were lucky as a nation, we were lucky as an Army, that for so many years, through fair and dark days, we had a man with a character such as his to guide our fortunes.

THE REFORMATION OF WAR.

By Colonel J. F. C. Fuller, D.S.O., London, Hutchinson and Co.

This work has been touched upon in the editorial notes in this number. It is one of the most important military works of recent years and contains matter of outstanding interest which should be widely read throughout the fighting services. Military literature since the war has consisted almost entirely of personal experiences and historical details. In the rare cases where lessons have been culled, the writers have too often imagined that the world will stand still and that another war will reproduce the conditions of 1917 or 1918. No such accusation can be levelled against Colonel Fuller. The views he expresses may not meet with general acceptance but they will stimulate imagination, cause discussion and focus attention on the nature of future warfare. It is an interesting sign of the times, indicative of some breadth of view on the part of the authorities concerned, that, in spite of extremist opinions and extravagance of expression, he should have recently been appointed an instructor at the Staff College. He is best known as the apostle of tanks, but in this book though tanks play a great part in his schemes they are treated with aircraft and submarines rather as vehicles than weapons. Submarines carry tanks, tanks and aeroplanes carry gas—and gas is to be the principal weapon. The main ideas though they conflict with many well-worn sayings—such as “God is in the side of the big battalions,” “Victory is to him who has the last reserve,” traverse none of accepted principles of war as they may be read in the first Chapter of F. S. R., Part II. The author does not, like Napoleon, “see only one thing, the enemy’s main army” he looks beyond at the spirit and will of the enemy people as represented by their government. Reduce that to submission and the war is won. Therefore why attack the enemy army? A mere

waste of time, if it can be avoided. Surprise it before mobilisation; run past it; fly over it—to the enemy's capital. Again a heresay to the old school—a geographical objective.

It is not certain of course that these methods would ensure success. Much depends on how far life, trade and administration is centralised in the capital; much also on the stoutness of the army and the moral of the people. With the normal highly centralised European civilisations however a blow on the head would generally paralyse the other members.

Much of the book is devoted to the replacement of muscle by petrol in small wars and, though here again there is matter of the greatest interest, the author is less convincing, especially when he would introduce the tank and the aeroplane to bush warfare. In their use for internal security duties he makes a stronger case and tests his theories by applying them academically to India.

Throughout the book he hits hard and well at military conservatism, throughout he opens vista of the future, the outcome, not of airy fancies, but of sound commonsense. He would however forward his cause and increase his circle of readers were he to adopt a greater simplicity of expression and were he to be content with plain statements unsupported by laboured analogies.

"THE SEPOY OFFICERS MANUAL."

Revised and brought up-to-date by Captain F. M. Wardle, Adjutant, 7th D. C. O. Rajputs.

The first edition of the "Sepoy Officers Manual" was published by Lieut. E. G. BARROW, 7th N. I., now General Sir Edmund Barrow, in 1880, and was subsequently brought up-to-date by successive Adjutants of the 7th Rajputs, the edition now under review being the 8th. There are probably few pre-war officers of the Indian Army who do not acknowledge the value of this excellent little volume, which comprises in a handy form information regarding practically every subject connected with administration, interior economy, discipline, etc., in an Indian unit. Up to 1914 it was

rightly regarded as practically indispensable, not only as a guide to candidates for the retention Exam. but also as a vade mecum for the regimental officer.

The reviser of the 8th edition has embarked on his task at a most unpropitious moment, as the re-organisation and reform of the Indian Army have resulted in a considerable portion of the book being obsolete before it has been published. For instance the organisation given in Chapter XIII is the "Group" organisation of July 1921, and the main duty of the Adjutant of an Indian Infantry Battalion is stated to be the training of recruits. These instances could easily be multiplied, and the result is that any officer who relies on the 8th edition as a text-book or vade mecum is apt to find himself badly let down.

The book still has its value for the examination candidate, who would educate himself thoroughly in the act of verifying and bringing it up-to-date. Certain Chapters too have a lasting value for all officers serving in India, especially the Chapter dealing with the castes and religions of the classes enlisted in the Indian Army. But it cannot regain its place as the indispensable vade mecum of the Indian Army officer until the tyranny of reform is overpast and we once more settle down to a more or less permanent organisation.

" THE DEFENCE OF INDIA."

By " Arthur Vincent " Oxford University Press. Price, Rs. 2.

This little book belongs to the " India of To-day " series which is now under publication by the Oxford University Press.

The author has set himself a hard task. In less than one hundred small pages he has endeavoured to sketch and explain the genesis and evolution of Indian defence.

On the whole he has succeeded admirably. Part I, which deals with maritime defence and with the northern and north-eastern frontiers, is perhaps the least convincing. On the subject of Indian maritime defence it is no doubt difficult to avoid platitude. But the author's views on the future of the Indian navy may perhaps be regarded more as a pious hope than an intelligent anticipation.

In Part II, which deals with the topography, ethnography, and history of the North-West Frontier and Afghanistan, the author finds himself much more at home. In the space at his disposal he has contrived to cram an astonishing amount of useful information. And his discussion of the " backward " and " forward " policies is excellent. To the general reader, and to the military student who desires a framework on which to base more exhaustive study, Part II should prove invaluable.

In Part III the author sketches some of the difficulties, resultant on the Reforms, which may be in store for those responsible for Indian defence in the future. This also, is naturally a question which it is difficult adequately to discuss. But the problem must be faced. And any discussion which gives the reading public food for thought is, therefore, to be commended. If every member of the Legislative Assembly could but be persuaded to read, mark learn, and inwardly digest this book as a whole, and Part III in particular, we could afford to view the future of Indian Defence with comparative equanimity.

The book is written in a pleasant and convincing style, and is easy to read.

MASHIR US SIPAH.

By Najibur Rahman, Army Press, Simla.

Mr. Najibur Rahman has compiled from Indian Army Orders and Army Instructions, India, published in the Fauji Akhbar, a most useful volume called Mashir Us Sipah (The Army Press, Simla Price, Re. 1).

Although the book is printed in Urdu an English index has been added to that in the Vernacular. It should serve as a useful book of reference to all who have to answer questions and advise Indian Army pensioners what steps are necessary to get the full benefit of the many concessions granted in recent years.

The JOURNAL of the UNITED SERVICE INSTITUTION of INDIA



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United Service Institution of India.

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ALL officers of the Royal Navy, Army, Royal Air Force, Colonial Forces, and of the Auxiliary Force, India, and Gazetted Government Officers shall be entitled to become members without ballot, on payment of the entrance fee and annual subscription.

The Council shall have the power of admitting as honorary members the members of the Diplomatic Corps, foreign, naval and military officers, foreigners of distinction, other eminent individuals, and benefactors to the institution, not otherwise eligible to become members.

Life Members of the Institution shall be admitted on the following terms:—

Rupees 75 + entrance fee (Rs. 10) = Rs. 85.

Ordinary members of the Institution shall be admitted on payment of an entrance fee of Rs. 10 on joining, and an annual subscription of Rs. 10, to be paid in advance. The period of subscription commences on 1st January.

Subscribing members of the Royal United Service Institution, Whitehall, London, are not liable for entrance fee while the affiliation rules are in force.

Life members receive the Journal of the Institution post free anywhere, but ordinary members only in India. All members may obtain books from the library on paying V-P. postage.

Honorary Members shall be entitled to attend the lectures and debates, and to use the premises and Library of the Institution without payment; but should they desire to be supplied with the Journal an annual payment of Rs. 10, in advance, will be required.

Divisional, Brigade and Officers' Libraries, Regimental Messes, Clubs, and other subscribers for the Journal, shall pay Rs. 10 per annum.

Sergeants' Messes and Regimental Libraries, Reading and Recreation Rooms shall be permitted to obtain the Journal on payment of an annual subscription of Rs. 8.

If a member fails to pay his subscription for any financial year (ending 31st December) before the 1st June in the following year, a registered notice shall be sent to him by the Secretary inviting his attention to the fact. If the subscription is not paid by 1st January following his name shall be posted in the Reading Room for six months and then struck off the roll of members.

Members joining the Institution on or after the 1st October, will not be charged subscription on the following 1st January, unless the Journals for the current year have been supplied.

Members are responsible that they keep the Secretary carefully posted in regard to changes of rank and address. Duplicate copies of the Journal will not be supplied free to members when the original has been posted to a member's last known address, and not been returned by the post.

Members or Subscribers to the Journal, intimating a wish to have their Journals posted to any address out of India, shall pay in advance Rupee 1 per annum, to cover foreign postage charges, but Life Members who have left India shall not be liable for foreign postage on Journals.

All communications shall be addressed to the Secretary, United Service Institution of India, Simla.

Contributions to the Journal.

All papers must be written in a clear, legible hand, and only on one side of the paper. All proper names, countries, towns, rivers, etc., must, when in manuscript, be written in capital letters. All plans must have a scale on them.

Contributors are responsible, when they send articles containing any information which they have obtained by virtue of their official positions, that they have complied with the provisions of A. R. I., Vol. II., para. 487, and King's Regulations, para. 453.

Anonymous contributions under a *nom-de-guerre* will not be accepted or acknowledged; all contributions must be sent to the Secretary under the name of the writer and the paper will, if accepted, be published under that name unless a wish is expressed for it to be published under a *nom-de-guerre*. The Executive Committee will decide whether the wish can be complied with.

The Committee reserve to themselves the right of omitting any matter which they consider objectionable. Articles are only accepted on these conditions.

The Committee do not undertake to authorise the publication of such papers as are accepted, in the order in which they may have been received.

Contributors will be supplied with three copies of their paper *gratis*, if published. Manuscripts of original papers sent for publication in the Journal will not be returned to the contributor, unless he expresses a wish to have them back and pays the postage.

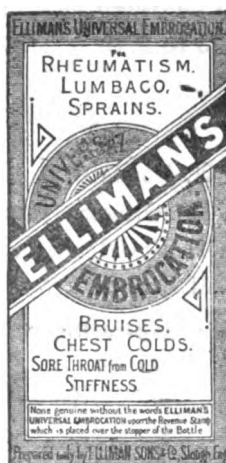
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United Service Institution of India.

OCTOBER, 1923.

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I.—New Members.

The following new members joined the Institution from 20th May 1923 to 27th August 1923:—

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 Capt. C. M. P. Durnford.
 Capt. C. Nicholson.
 Capt. J. H. Whelton.
 Capt. G. A. Quayle.

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 Capt. A. N. Venning.
 Capt. W. G. R. Elliott.
 Col. W. B. Dunlop.
 Col. W. Parker.
 Major-Genl. L. R. Kenyon.
 Major H. St. G. Hammersley.
 The Hon'ble Major-Genl. R. C. MacWatt.

Capt. B. H. Robertson.
 Major H. J. Huxford.
 Major C. E. Daly.
 Air Vice-Marshal P. Game.
 Major A. G. O. Mayne.
 Lieut.-Col. A. S. Marriott.
 The Hon'ble Mr. J. Crerar.
 Lieut. Habibur Rahman Khan.
 Col. F. J. Marshall.
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 Capt. A. D. E. Reiche.
 Mr. H. R. Pate.
 Lieut.-Col. P. W. L. Broke-Smith.
 Capt. G. V. L. Prowse.
 Capt. H. V. Lewis.
 Major G. Gould.
 Capt. J. M. Hobbs.
 Major V. W. Roche.
 Lieut. H. M. Day.
 Lieut.-Col. M. Crofton.
 Capt. J. F. G. Hislop.
 Major L. P. Anderson.
 Capt. F. Mattocks.
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Lieut.-Col. G. Craster.	Lieut. C. G. Bailey.
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Capt. H. S. Gordon.	Major R. N. G. Scott.
Capt. M. Huxford-Jones.	Capt. H. H. Stable.
Lieut. H. P. Gardham.	Capt. S. G. S. Skene.
Lieut. G. H. Dean.	Capt. G. H. Chambers.
Col. G. A. H. Beatty.	Lieut. R. J. Wilkins.
Major A. H. Barne.	Capt. F. C. Goddard.
Flying Officer G. F. Mackay.	Lieut. H. R. Hamilton-Cox.
Lieut. R. H. P. Addington.	Lieut.-Col. W. B. Eddowes.
Major S. V. G. Burroughes.	Capt. L. J. L. Pullar.
Lieut. H. A. Hounsell.	Mr. C. D. M. Hindley.
Lieut. J. F. G. Blockley.	Lieut. K. Daulat Sen.
Capt. A. E. Clarke.	Capt. E. T. Metcalfe.
Major P. C. Saunders.	Major H. E. Weekes.

II.—Examinations.

Books on Military History and Languages with Dictionaries are available in the Library and the following list of books, which is complete in accordance with the War Office List, may be found useful for reference by officers, studying for promotion examinations or entrance to the Staff College.

MILITARY HISTORY (SPECIAL PERIOD).

1. *The Campaign of the British Army in France and Belgium up to 20th November 1914.*

A.—OFFICIAL ACCOUNT.

Sir John French's Despatches.

B.—OTHER BOOKS.

40 days in 1914, by General Maurice (new edition).

The Battle of the Marne, by G. H. Perris.

1914, by Viscount French.

General sketch of the European War, by Belloc.

The Great War, by Colonel Sedgwick.

My memoirs, by Ludendorf.

Falkenhayn's Book.

Von Kluck's Book.

British Campaign in France, Flanders, by Conan Doyle, 1914.

Nelson's History of the War.

Ypres, by German General Staff.

Oxford pamphlets, August 1914. The Coming of the War, by S. Williamson.

Oxford pamphlets, August 1914, Nos. VII and X.

Times Documentary History of the War, Vol. V, Military, Part I.

Times Documentary History of the War, Vol. VIII, Part III.

Der Grobe Krieg Schlacht bei Mons.

Der Grobe Krieg Schlacht bei Longwy.

2. *The Palestine Campaign.*

A.—OFFICIAL ACCOUNT.

A brief record of the advance of the Egyptian Expeditionary Force, 1919.

B.—OTHER BOOKS.

Allenby's Final Triumph, by W. T. Massey.

How Jerusalem was won, by W. T. Massey.

3. *Organisation of Army since 1868.*

A.—ORGANISATION OF ARMY SINCE 1868.

History of British Army, by Fortescue.

Outline of Development of British Army, by Genl. Anderson.

Our Fighting Services, by Sir Evelyn Wood.

Secretary's Notes

B.—FORCES OF THE EMPIRE.

The Statesman's Year Book.

Army List.

Articles in Newspapers and Magazines, *viz.*, R. U. S. I.

Army Quarterly, Journal of the U. S. I. of India, etc.

4. *Development and constitution of the British Empire.*

A.—THE BRITISH EMPIRE.

Encyclopædia Britannica—(contains much concentrated information).

The Statesman's Year Book.

Whitaker's Almanack.

The Colonial Office List.

The British Empire and its History, by E. G. Hawke.

The Government of British Empire, by Jenks, 1918.

The British Empire (6 lectures) by Sir C. P. Lucas, 1918.

The foundation and growth of the British Empire, by J. A. Williamson, 1918.

The beginnings of English Overseas Enterprise, by Sir C. P. Lucas, 1917.

The Government of England, by L. A. Lowell, 1912.

The Expansion of the British Empire, by W. H. Woodward, 1900.

Overseas Britain, by E. F. Knight, 1907.

The origin and growth of the English Colonies and of their system of Government, by H. E. Egerton, 1903.

A short History of Politics, by Jenks, 1900.

The English Constitution, by Bagehot, 1909.

The Expansion of England, by Sir J. Seely, 1883.

Introduction of the study of the law of the Constitution, by A. V. Dicey, 1908.

England in the Seven Years' War, Sir J. Corbett, 1907.

Selected Speeches and Documents on British Colonial Policy, 2 Vols., A. B. Keith, 1918.

B.—BOOKS ON SPECIAL PORTIONS OF THE EMPIRE OR WORLD.

The Rise and Expansion of British Dominions in India, by Sir A. C. Lyall, 1894.

A brief history of the Indian Peoples, by Sir W. H. Hunter, 1907.

The Nearer East, by Hogarth, 1902.

Secretary's Notes.

- Modern Egypt, by Cromer, 1908.
 The History of Canada, by W. L. Grant.
 Nova Scotia, by B. Wilson, 1911.
 Report on British North America, by Sir C. P. Lucas.
 The Union of South Africa, by R. H. Brand, 1909.
 Short History of Australia, by E. Scott.
 History of the Australasian Colonies, by Jenks, 1912.
 The English in the West Indies, by J. A. Froude, 1888.
 The Lost Possessions of England, by W. F. Lord, 1896.

5. Military Geography.

- Naval and Military Geography of the British Empire, by Dr. Vaughan Cornish, 1916.
 Outlines of Military Geography, by Col. A. C. Macdonnell, 1911.
 Introduction of Military Geography, by Col. E. S. May.
 Imperial Defence, by Col. E. S. May.
 Britain and the British Seas, by H. J. Makinder, 1907.
 Military Geography, by Macguire.
 Imperial Strategy, by Repington.
 War and the Empire, by H. Foster.
 Historical Geography of British Colonies (Dominions), 7 Vols., by Sir C. P. Lucas, 1906—17.
 Vol. 1, Mediterranean.
 Vol. 2, West Indies.
 Vol. 3, West Africa.
 Vol. 4, South Africa.
 Vol. 5, Canada.
 Vol. 6, Australia.
 Vol. 7, India.

- The Influence of Sea Power on History, by A. I. Mahan, 1890.
 Historical Geography of the British Empire by Hereford George.
 The Mastery of the Pacific, by A. R. Colquhoun, 1902.
 Frontiers, by C. B. Fawcett, 1918.

III.—Payment for Articles in the Journals.

Articles accepted for publication in the Journal are paid for, and a sum of approximately Rs. 400 is awarded for articles and reviews published in each Quarterly Journal.

IV.—Contributions to the Journal.

Articles submitted for publication must be typed in *duplicate*. With reference to Army Regulations, India, Volume II, paragraph 487, and King's Regulations, paragraph 453, as amended by Army Order 340 of 1913, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Committee.

Instructions for the Preparation of Drawings and Plans for
Reproduction by Lithography.

These should be in *jet* black. No washes nor ribands of colour should on any account be used.

If it is absolutely necessary to use colour (and these are only permissible in line work or names) the following will reproduce photographically, *i.e.* :—

Dark red, dark orange, dark green. No other colour should on any account be used.

V.—Library Rules.

1. The Library is only open to members and honorary members of the United Service Institution of India, members are requested to look upon books as not transferable to their friends.

2. No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

3. The United Service Institution of India is open all the year round—including Sundays—from 9 A.M. until sunset. Books may be taken out at any time provided Rule 2 is complied with.

4. A member shall not be allowed, at one time, more than three books or sets of books.

5. Papers, magazines, "Works of reference" or books marked "Not to be taken away," or noted as "Confidential" may not be removed.

6. No particular limit is set as to the number of days for which a member in Simla may keep a book, the Council being desirous of making the library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member it will be re-called.

7. Applications for books from members at out-stations are dealt with as early as possible, and books are despatched per Registered V. P. P. They must be returned carefully packed per Registered Parcel Post within one month of date of issue, or application made for permission to retain them for a further period. This will always be granted unless the book is required by another member.

8. If a book is not returned at the end of four months, it must be paid for without the option of return, if so required by the Executive Committee.

9. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print the value shall be fixed by the Executive Committee, and the amount, when received, spent in the purchase of a new book.

10. The issue of a book under these rules to any member implies the latter's compliance with the rules, and the willingness to have them enforced, if necessary, against him.

11. A list of all books presented and purchased and also a list of books useful to members studying for the Staff College and promotion Examinations will be found, under Secretary's Notes, in the quarterly issue of the U. S. I. Journal. Members are invited to note any books which they think might with advantage be procured for the Institution. The suggestions will be placed before the Secretary.

12. Members are invited to contribute presents of books, maps, and photographs of naval and military interest. These may be addressed to the Secretary, U. S. I. of India, Simla. They will be duly acknowledged.

VI.—Library Catalogue.

Under Revision.

033.—Gold Medal Prize Essay.

GOLD MEDAL PRIZE ESSAY COMPETITION, 1923-24.

The Council have chosen as the subject for the Gold Medal Essay for 1923-24 the following:—

“THE DEVELOPMENTS WHICH HAVE TAKEN PLACE IN THE ARMY HAVE GREATLY INCREASED THE WORK INVOLVED IN ITS ADMINISTRATION: IN WHAT DIRECTIONS CAN THIS ADMINISTRATION WORK BE SIMPLIFIED, AND REDUCED TO A MINIMUM, ESPECIALLY FROM A REGIMENTALLY STANDPOINT, WITH A VIEW TO GIVING GREATER OPPORTUNITY FOR IMPROVING THE EFFICIENCY OF THE ARMY IN ITS TRAINING FOR WAR.”

The following are the conditions of the competition:—

- (1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, and Royal Air Force or Auxiliary Force who are members of the U. S. I. of India.
- (2) Essays must be printed or type-written and submitted in *triplicate*.
- (3) When a reference is made to any work, the title of such work is to be quoted.
- (4) Essays are to be *strictly anonymous*. Each must have a motto, and enclosed with the essay, there should be sent a *sealed* envelope with the motto written on the outside and the name of the competitor inside.
- (5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1924.
- (6) Essays will be submitted for adjudication to 3 Judges chosen by the Council. When the decisions of the 3 Judges are received the Committee will submit the four essays, placed first in order by the Judges, with their recommendations on the award of the Gold Medal to the Council, who will decide whether the Medal is to be awarded and whether the essay be published.
- (7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1924.
- (8) All essays submitted are to become the property of the United Service Institution of India, *absolutely* and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.
- (9) Essays should not exceed about 15 pages of the size and style of the Journal exclusive of any appendices, tables or maps.

By order of the Council,

SIMLA:
27th August 1923.

}

H. G. MARTIN, MAJOR, R.A.
Secretary, U. S. I. of Ind

VIII.—Army List pages.

The U. S. I. is prepared to supply members and units with manuscript or type-written copies of Indian Army List pages, at the following rate:—

Type-written, per page, Rs. 2.

List of books purchased.

NEW BOOKS.			
<i>Title.</i>		<i>Published</i>	<i>Author.</i>
Statesman's Year Book	...	1923	Sir J. Keltie.
When Labour Rules	...	1923	J. H. Thomas.
The Cambridge Ancient History, Vol. II, Egypt and Babylonia to 1580 B.C.	...	1923	J. D. Bury, S. A. Cock and F. E. Adcock.
The Life of Lt.-Genl. Sir James Moncrieff Grierson	...	1923	D. S. MacDiarmid.
Indian Bird Life	...	1923	M. R. N. Holmer.
A Naturalist in Hindustan	...	1923	R. W. G. Hingston.
A History of the America People	... ..	1923	S. E. Formah.
War: Its Nature, Cause and Cure	... ..	1923	G. L. Dickenson.
An Indiscreet Chronicle from the Pacific	... ..	1923	P. Weals.
A Short History of the World...		1922	H. G. Wells.
A Revision of the Treaty	...	1922	J. M. Keynes.
The New World of the South, 2 Vols., 1916. Reprinted	...	1922	W. H. Fichett.

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<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
The Cambridge History of India, Vol. I. "Ancient History"	1922	E. J. Rapson.
The Origins of the War ...	1922	M. Poincaré.
A History of the Peninsular War (Vol. 6) ...	1922	C. Oman.
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Military Law made Easy. Revised Edn. ...	1920	Lt.-Col. Banning.
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Seaways of the Empire ...	1918	A. J. Sargent.

Secretary's Notes.

<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
Tactical Notes for Scheme Problems	... 1916	Major W. F. Trydall.
Tamil Self Taught (in Roman Characters)	... 1911	Wickremasinghe.
Rivers and Canals, 2 Vols.	... 1896	V. Harcourt.
A Short History of the British Commonwealth, 2 Vols. (Vol. I, pub. 1920, Vol. II, pub. 1922)	...	Ramsey Muir.
A General Sketch of the European War, 2nd Phase	...	H. Belloc.

Books Presented.

<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
Presented by— <i>The Oxford University Press, Bombay.</i>		
1. Oxford of To-day	... 1923	L. A. Crosby and F. Aydecotte.
2. The Decisive Battles of Modern Times...	1923	F. E. Whitton.
3. Irrigation in India	1923	D. G. Harris.
„ <i>Messrs. William Clowes, London.</i>		
A Science of Infantry Tactics simplified	... 1923	Captain B. H. Liddell-Hart.
„ <i>War Office, London.</i>		
Report on the Examination for promotion (six copies) April	... 1923	Official, War Office.
„ <i>Messrs. Angus and Robertson-Sydney, Australia.</i>		
Official History of Australia in the war of 1914-18, Vol. 7	... 1923	H. S. Gullett.

<i>Title.</i>	<i>Published.</i>	<i>Author.</i>
Presented by—		
<i>Messrs. Gale and Polden, Aldershot.</i>		
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Guide to a Second Class Certificate, "Mathe- matics"	1923	
" <i>Messrs. Sifton Pread and Co., London.</i>		
The Gallipoli Campaign	1923	"A Student."
" <i>Messrs. Thacker Spink and Co., Calcutta.</i>		
"Courts Martial in India" and one copy present- ed by Author Maj. L. M. Peet	... 1923	
" <i>Government of India.</i>		
"Rajputana Classes" ...	1923	
India's Parliament, Vol. V	1923	
" <i>General Staff, Army Headquarters, India.</i>		
Routes in the Allahabad Brigade Area	... 1923	"Official."
" <i>Punjab Government Press.</i>		
The Land of Five Rivers (Punjab Administra- tion Report), Vol. I ...	1923	
Census of India, 1923, Vol. 15, pt. 2, Tables (Punjab and Delhi) ...	1923	
Notes on the History of the Leicestershire Re- giment. (<i>Presented by Col. of the Regiment, Jhansi.</i>)		
Babylonian Problems. (<i>Presented by the Author, Lt.-Col. W. H. Lane.</i>)		

*Secretary's Notes.***Books on Order.**

<i>Title.</i>	<i>Author.</i>
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Element of Economics of Industry ...	Marshall.
The British Empire at Bay ...	A. Clox.

~~History of the~~

of the Dominions

Synopsis of Lectures delivered at the
Mountain Warfare School.

United Service Institution of India.

Prize Essay Gold Medallists.

(With rank of Officers at the date of the Essay.)

1872. . ROBERTS, Lieut.-Col. F. S., V.C., C.B., R.A.
1873. . COLQUHOUN, Capt. J. S., R.A.
1874. . COLQUHOUN, Capt. J. S., R.A.
1879. . ST. JOHN, Maj. O. B. C., R.E.
1880. . BARROW, Lieut. E. G., 7th Bengal Infantry.
1882. . MASON, Lieut. A. H., R.E.
1883. . COLLEN, Maj. E. H. H., S.C.
1884. . BARROW, Capt. E. G., 7th Bengal Infantry.
1887. . YATE, Lieut. A. C., 27th Baluch Infantry.
1888. . MAUDE, Capt. F. N., R.E.
 YOUNG, Maj. G. F., 24th Punjab Infantry (specially awarded a silver medal).
1889. . DUFF, Capt. B., 9th Bengal Infantry.
1890. . MAGUIRE, Capt. C. M., 2nd Cav., Hyderabad Contingent.
1891. . CARDEW, Lieut. F. G., 10th Bengal Lancers.
1893. . BULLOCK, Maj. G. M., Devonshire Regiment.
1894. . CARTER, Capt. F. C., Northumberland Fusiliers.
1895. . NEVILLE, Lieut.-Col. J. P. C., 14th Bengal Lancers.
1896. . BINGLEY, Capt. A. H., 7th Bengal Infantry.
1897. . NAPIER, Capt. G. S. F., Oxfordshire Light Infantry.
1898. . MULLALLY, Maj. H., R.E.
 CLAY, Capt. C. H., 43rd Gurkha Rifles (specially awarded a silver medal).
1899. . NEVILLE, Col. J. P. C., S.C.
1900. . THUILLIER, Capt. H. F., R.E.
 LUBBOCK, Capt. G., R.E. (specially awarded a silver medal).
1901. . RANKEN, Lieut.-Col. G. P. P., 46th Punjab Infantry.
1902. . TURNER, Capt. H. H. F., 2nd Bengal Lancers.
1903. . HAMILTON, Maj. W. G., D.S.O., Norfolk Regiment.
 BOND, Capt. R. F. G., R.E. (specially awarded a silver medal).
1904. . MACMUNN, Maj. G. F., D.S.O., R.F.A.
1905. . COCKERILL, Maj. G. K., Royal Warwickshire Regiment.
1907. . WOOD, Maj. E. G. M., 99th Deccan Infantry.
1908. . JEUDWINE, Maj. H. S., R.A.
1909. . MOLYNEUX, Maj. E. M. J., D.S.O., 12th Cavalry.
 ELSMIE, Maj. A. M. S., 56th Rifles, F. F. (specially awarded a silver medal).
1911. . Mr. D. PETRIE, M.A., Punjab Police
1912. . CARTER, Maj. B. C., The King's Regiment.
1913. . THOMSON, Maj. A. G., 58th Vaughan's Rifles (F.F.).
1914. . BAINBRIDGE, Lieut.-Col. W. F., D.S.O., 51st Sikhs (F.F.).
 NORMAN, Maj. C. L., M.V.O., Q.V.O., Corps of Guides (specially awarded a silver medal).
1915. . No Award.
1916. . CRUM, Maj. W. E., V.D., Calcutta Light Horse.
1917. . BLAKER, Maj. W. F., R.F.A.
1918. . GOMPERTZ, Capt. A. V., M.C., R.E.
1919. . GOMPERTZ, Capt. M. L. A., 108th Infantry.
1920. . KEEN, Lt.-Col. F. S., D.S.O., 2 15th Sikhs.
1921. . No Award.
1922. . MARTIN, Maj. H. G., D.S.O., O.B.E., R.F.A.
1923. . KEEN, Colonel F. S., D.S.O., I.A.

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1. The Macgregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June :—

(a) For officers—British or Indian—silver medal.

(b) For soldiers—British or Indian—silver medal, with Rs. 100 gratuity.

3. For specially valuable work a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for special good work.

4. The award of medals is made by His Excellency the Commander-in-Chief as Vice-Patron, and the Council of the United Service Institution who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.

Note.

(i) Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

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(With rank of officers at the date of the Award.)

1889.. BELL, Col. M. S., V.C., R.E. (specially awarded a gold medal).

1890.. YOUNGHEUSAND, Capt. F. E., King's Dragoon Guards.

* N.B.—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Volunteers and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Imperial Service Troops.

MacGregor Memorial Medalists—(contd.)

- 1891.. SAWYER, Major H. A., 45th Sikhs.
RAMZAN KHAN, Havildar, 3rd Sikhs.
- 1892.. VAUGHAN, Capt. H. B., 7th Bengal Infantry.
JAGGAT SINGH, Havildar, 19th Punjab Infantry.
- 1893.. BOWEN, Capt. H., 17th Bengal Cavalry (specially awarded a gold medal).
FAZALDAD KHAN, Dafedar, 17th Bengal Cavalry.
- 1894.. O'SULLIVAN, Major G. H. W., R.E.
MULL SINGH, Sowar, 6th Bengal Cavalry.
- 1895.. DAVIES, Capt. H. B., Oxfordshire Light Infantry.
GANGA DYAL SINGH, Havildar, 2nd Rajputs.
- 1896.. COCKBRILL, Lieut. G. K., 28th Punjab Infantry.
GHULAM NABI, Sepoy, Q. O. Corps of Guides.
- 1897.. SWAYNE, Capt. E. J. E., 16th Rajput Infantry.
SHAHZAD MIR, Dafedar, 11th Bengal Lancers.
- 1898.. WALKER, Capt. H. B., Duke of Cornwall's Light Infantry.
ADAM KHAN, Havildar, Q. O. Corps of Guides.
- 1899.. DOUGLAS, Capt. J. A., 2nd Bengal Lancers.
MIHR DIN, Naik, Bengal Sappers and Miners.
- 1900.. WINGATE, Capt. A. W. S., 14th Bengal Lancers.
GURDIT SINGH, Havildar, 45th Sikhs.
- 1901.. BURTON, Maj. E. B., 17th Bengal Lancers.
SUNDAR SINGH, Colour Havildar, 31st Burma Infantry.
- 1902.. RAY, Capt. M. B. E., 7th Rajput Infantry.
TILBIE BHANDARI, Havildar, 9th Gurkha Rifles.
- 1903.. MANIFOLD, Lieut.-Col. C. C., I.M.S.
GHULAM HUSSAIN, Lance-Dafedar, Q. O. Corps of Guides.
- 1904.. FRASER, Capt. L. D., R.G.A.
MOGHAL BAZ, Dafedar, Q. O. Corps of Guides.
- 1905.. RENNICK, Maj. F., 40th Pathans (specially awarded gold medal).
MADHO RAM, Havildar, 8th Gurkha Rifles.
- 1906.. SHAHZADA AHMAD MIR, Risaldar, 36th Jacob's Horse.
GHAFUR SHAH, Lance-Naik, Q. O. Corps of Guides Infantry.
- 1907.. NANGLE, Capt. M. C., 92nd Punjabis.
SHEIKH USMAN, Havildar, 103rd Mahratta Light Infantry.
- 1908.. GIBBON, Capt. C. M., Royal Irish Fusiliers.
MALANG, Havildar, 56th Punjab Rifles.
- 1909.. MUHAMMAD RAZA, Havildar, 106th Pioneers.

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MacGregor Memorial Medalists—(concl'd.).

1910. SYKES, Maj. P. M., C.M.A., late 2nd Dragoon Guards (specially awarded a gold medal).
 TURNER, Capt. F. G., R.E.
 KHAN BAHADUR SHEER JUNG, Survey of India.
1911. LBACHMAN, Capt. G. E., The Royal Sussex Regiment.
 GURMUKH SINGH, Jemadar, 93rd Burma Infantry.
1912. PRITCHARD, Capt. B. E. A., 83rd Wallahjabad Light Infantry (specially awarded a gold medal).
 WILSON, Lieut. A. T., C.M.G., 32nd Sikh Pioneers.
 MOHIBULLA, Lance-Dafedar, Q. V. O. Corps of Guides.
1913. ABBAY, Capt. B. N., 27th Light Cavalry.
 SIRDAR RHAN, Sowar, 39th (K.G.O.) Central India Horse.
 WARATONG, Havildar, Burma Military Police (specially awarded a silver medal).
1914. BAILBY, Capt. F. M., I.A. (Political Dept.).
 MORSHEAD, Capt. H. T., R.E.
 HAIDAR ALI, Naik, 106th Hazara Pioneers.
1915. WATERFIELD, Dapt. F. C., 45th Battray's Sikhs.
 ALI JUMA, Havildar, 106th Hazara Pioneers.
1916. ABDUR RAHMAN, Naik, 21st Punjabis.
 ZARGHUN SHAH, Havildar, 58th Rifles (F.F.) (specially awarded a silver medal).
1917. MIAN AFRAZ GUL, Sepoy, Khyber Rifles.
1918. NOEL, Capt. E. W. C. (Political Department).
1919. KEELING, Lt.-Col. E. H., M.C., R.E.
 ALLA SA, Jemadar, N.-E. Frontier Corps.
1920. BLACKER, Capt. L. V. S., Q. V. O. Corps of Guides.
 AWAL NUR, C. Qm. Havildar, 2nd Bn., Q. V. O. Corps of Guides.
 (Special gratuity of Rs. 200.)
1921. HOLT, Major A. L., Royal Engineers.
 SHEER ALI, Sepoy No. 4952, 106th Hazara Pioneers.
1922. ABDUL SAMAD SHAH, Capt., O.B.E., 31st D. C. O. Lancers.
 NUR MUHAMMED, Lance-Naik, 1st Guides Infantry, F. F.
1923. BRUCE, Capt. J. G., 2/6th Gurkha Rifles.
 SOHBAT, Head Constable, N.-W. F. Police.
 HARI SINGH THAPA, Survey Department.

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H. G. MARTIN,
MAJOR, R.A.,

Secretary, United Service Institution of India.

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The Journal

OF THE

United Service Institution of India.

Vol LIII OCTOBER, 1923 No. 233

EDITORIAL.

During the three months which have elapsed since the last issue of the Journal, the situation in the Ruhr, and in Germany generally, has deteriorated rapidly. In January last France embarked on a policy of punitive penetration in the Ruhr. Whether her object was the exaction of reparations, or whether—as she herself avers—she hoped thereby to create in Germany the will to pay, is now immaterial. The results of her policy—economic, military and moral—are tragically obvious. Economically, German payments, both in money and coal, have ceased. The mark is valueless; and it is now to be replaced by an entirely new currency. The franc, both French and Belgian, though its value may fluctuate, is yet tottering on the edge of the abyss. And Germany is starving. Militarily, the French have been tempted to occupy point after point, each new position to safeguard the last; with a zone of occupation so extended their detachments may well find themselves at the mercy of hunger insurrection. Morally, in their efforts to quell passive resistance the French have been forced to resort to a tyranny too much in keeping with the traditions of Prussianism.

On his assumption of office Mr. Baldwin has found himself at grips with decisions the ultimate moment of which to the Empire and to Europe can be nothing short of stupendous. The reception of the British Note of August 11th both in England and in the Dominions at least shows that he has all shades of political opinion in the Empire behind him. And not in the Empire only. There are indications that Italy and the Little Entente are at last thoroughly alarmed at the trend of French policy; that Poland has no wish to find herself shut in between two Soviet states; and that even Belgium has begun to doubt French infallibility.

Briefly, the British contentions are these. The occupation of the Ruhr is contrary to the Treaty of Versailles; it must end as soon as economic guarantees from Germany are put into effective operation, and cannot be maintained—possibly in perpetuity—pending Germany's payment of reparations in full. The maximum which Germany can pay must be fixed by a commission of experts, which commission must contain an American representative to ensure impartiality. Subject to the appointment of this commission, Britain is prepared to accept a sum of 12·2 milliard gold marks in settlement of all loans outstanding from the Allies together with all claims against Germany; a sum equal to her funded debt to America and less than the amount due to her from the Allies alone. But Britain cannot acquiesce either in the French claim to reparations in excess by 26 milliard gold marks of the total French debt (of 27 milliards) to Britain and the United States, or to the Belgian claim to priority of payment for the restoration of the devastated area, since Belgium has been already entirely relieved of her war debts. Nor can Britain acquiesce in the cancellation of France's debt to her: she must insist on the payment of a portion at least of the interest on it as soon as the franc and sterling exchange becomes stabilised. In the absence of some indication that France and Belgium are prepared to accept British co-operation, Britain will be driven to contemplate independent action to hasten a settlement.

The French reply to the British Note was received on August 26th. After citing various defaults on the part of Germany which, she claims, justify her occupation of the Ruhr, France announces her intention of modifying her occupation only as passive resistance ceases, subject to progressive evacuation in proportion to payments. She, moreover, persists in her claim to a sum of 26 milliard gold marks out of A and B bonds, plus a further 27 milliard out of C bonds, on the grounds that she has advanced large sums against German reparations. This contention is doubtless true. France is now maintaining a superiority of military forces, on land and in the air, relatively far greater than anything Germany aimed at before the war. A superiority for which, indirectly, we are largely paying. France further claims that the settlement of inter-allied debts must be postponed until reparation has been made for the devastated areas. Nor does she accept the suggested appointment of a commission of experts to supersede the Reparations Commission. In fact, there are no indications that France is prepared to modify her attitude in any respect, and independent action on the part of Great Britain appears more and more inevitable. Meanwhile, Dr. Cuno has resigned, and has been succeeded by Herr Stressmann as Chancellor. The latter has formed a coalition cabinet. He has an unenviable task. Strikes and rioting with bloodshed have been reported from all over Germany.*

To turn now to the Near Eastern situation, the Treaty of Lausanne has been ratified by the National Assembly, and the British evacuation of Constantinople should be completed by October 4th.† Two papers which appear in this issue of the Journal must be of peculiar interest to all who witnessed the

* Since the above was written the situation has improved somewhat, owing to Herr Stressmann's offer of economic guarantees and indications of a more reasonable attitude on the part of France. The franc has appreciated accordingly.

† "Islam and the Turkish Empire during the Great War, 1914-18." By Captain Channer.

The Recent Military Situation in Turkey." By Maj.-Genl. Sir Hastings Anderson, K.C.B.

utter ruin of Turkish arms in 1918, and have since watched with amazement the apotheosis of a new Turkey. As Captain Channer tells us, the Turkish army and nation in 1918 were demoralised to an extent unprecedented in history. True: when it came to a pinch, the stubborn Anatolian blood would still out even then, and individual units and formations still fought with the stolid courage of a fighting stock. But it was the courage of despair. The Turkish army was a army without an ideal.

Then came the breathing space after the Armistice. And in that breathing space was born the National Assembly of Angora. Its members were young, energetic, intensely patriotic, and bred to arms. They evolved the National Pact. It was an ideal. The Greek invasion did the rest. Even the war-weary Anatolian peasantry was fired with the ideal. Morale was restored. The world witnessed Sakaria and the final route of the Greeks.

In times of deadly stress, Mustapha Kemal and his Lieutenants have guided the Turkish barque with the skill of inspiration. Now that they have reached port, it remains to be seen whether they can maintain their mental balance in an atmosphere of peace. Statesmanship is now the first essential. We all know what sort of fist the average statesman makes of generalship. The converse is perhaps equally true: generals have not invariably proved heaven-born statesmen. To develop her natural resources Turkey needs foreign enterprise and foreign capital. The Capitulations are now a thing of the past, and neither of these will be forthcoming without adequate guarantees.

There remains the question of the Straits. It seems that the fiction of their demilitarization is to be continued. Obviously, however, the Straits can be closed by the Turks at will, by mines, by the fire of mobile howitzers medium and heavy, and by the action of aircraft based outside the demilitarized zone. No international commission can ensure effective demilitarization unless they keep on the spot forces capable of coping with any that the Turks can put against them.

That vexed question, the proposed naval base at Singapore, is adequately discussed by Archibald Hurd and Major-General Sir. George Aston in the August numbers of the *Empire Review* and *NIXth Century* respectively. After upholding the continued supremacy of the capital ship, the former shows that the limitations of naval armament imposed by the Washington Naval Treaty on the Empire as a whole have rendered it absolutely essential that our one-power-standard* battle-fleet, normally based in the Mediterranean, should be capable of concentrated action either in the Atlantic or the Pacific. But no dock at present exists in Far Eastern waters capable of accommodating either a battleship or a large aircraft-carrier. And the Dominions themselves are now precluded from laying down a single capital ship, so local squadrons are out of the question. We are, therefore, in honour bound to remedy a strategically false position: a fact realised by other signatories to the Washington Convention who fully anticipated our construction of a base at Singapore. The articles in question deal with particular aspect of the† problem which has been already discussed as a whole in those admirable books "The Problem of the Pacific in the XXth Century" by the Russians Golovin and Bubnov, and "The Influence of Sea Power on the Political History of Japan" by Vice-Admiral Ballard.

A decision has at length been reached on the recommendations of the Indian Retrenchment Committee in regard to reductions in the Army in India. The reductions to be effected in the fighting services have been discussed both in the Press and in the Legislative Assembly. The Army has made the sacrifices required of it. And these sacrifices have been very real: a fact which should not be overlooked. For there is a danger, perhaps, that

* Which is to consist of 15 Capital ships, as opposed to over 80 in 1914.

† The bearing in this problem of the recent earthquake is as yet impossible to estimate.

the Army may be thought to have given of its superfluity. It will be of interest, therefore, briefly to recapitulate the reductions which are now in progress.

Of her eight British cavalry regiments, India is to lose two. But the place of these is to be filled, to some extent at least, by a proportionate increase in Armoured Car companies from six to eight. India is also to lose one of her five horse artillery batteries.

There is to be no reduction in the number of British battalions. The peace establishment of a battalion is to be reduced from 1,012 to 882 other ranks. Quite apart from war wastage, one need but consider the countless calls, administrative and clerical, on British personnel during the first months of mobilization to realise what a very real sacrifice this reduction must entail to the army.

In the field, medium and pack artillery, similarly, no units are to be reduced. The reductions of personnel, etc., of medium and pack artillery are minor in character. In the eleven brigades of field artillery, however, the necessary financial saving is to be effected by substituting 4 horsed for 6 horsed teams throughout in all "first-line" ammunition wagons, by reducing three brigades to a lower establishment on which only two sections per battery are horsed, and by further reducing a fourth brigade to what practically amounts to cadre formation. Without homogeneity of peace establishments, uniformity of training must be almost unattainable, and problems of maintenance and relief must be unduly complicated. But, in addition, the 4 horsed team is an experiment which can be regarded only with anxiety. We are aware that a similar innovation has been introduced at home. But there the field artillery has already reached the transition stage to mechanisation, while, normally, good metalled roads can be counted upon. Under Eastern conditions, the mobility of our field artillery has, unquestionably, been reduced. For

it must be remembered that the "firing-battery," and "first-line," wagons of a battery should be in all respects interchangeable. The fact that all artillery horses must be imported, and subsequently acclimatized, adversely effects the position still further.

In the Indian infantry and pioneers the necessary financial saving has been effected by a reduction in peace establishment of 64 men per active battalion (other than Gurkha battalions and the Hazara Pioneers). To facilitate mobilization, new terms of service have been introduced which approximate more closely to those of the British Army. The sepoy will now enlist for five years with the colours and ten with the reserve, and the Class A reservist is to be immediately available on mobilization. The system is undoubtedly sound in principle, and if the stipulated periods of reserve training are not curtailed should prove fully successful.

The reductions in staffs and administrative services are equally drastic. That the efficiency of the army has not been adversely affected thereby it is impossible to maintain, though all that is humanly possible has doubtless been done to reduce the loss of efficiency to the minimum compatible with the saving demanded.

The Bertrand Stewart Military Prize Essay competition has been decided. The first prize has been awarded to Major C. F. Stoehr, R.E., whose essay is published in the July number of the *Army Quarterly*.

The subject of the essay, it is hardly needful to say, was the discussion of a Ministry of Defence, and of the best means to ensure co-operation between the three services. Major Stoehr's essay admirably serves to clarify the issues. He concludes that, in addition to the Committee of Imperial Defence, our requirements are: a combined Intelligence and Plans Staff; a measure of common training, and attachment to other Services, for Staff College students

of all three Services before they join this combined Staff; a Ministry of Defence, but he regards this of importance secondary to that of the combined Staff; and inter-Service departmental committees to eliminate overlapping. According to recent statements in the Press, an Imperial War College is to be formed in the near future for the training of a combined Staff; while a start in this direction has already been made in India where it is proposed that selected graduates from each course at the Quetta Staff College should be attached to the Royal Air Force for a period of six weeks. The Prime Minister, however, has announced that it has not been found practicable to create a Ministry of Defence. In accordance with the recommendations of the National and Imperial Defence Committee, the Committee of Imperial Defence is to remain an advisory body presided over by the Prime Minister, and the existing system of Departmental initiative is to continue. But, in the absence of the Prime Minister, the Chairman of the Committee is to be allowed greater initiative in co-ordinating the common action of the three Services, and, assisted by the three Chiefs of Staff is to keep the defence situation continuously under review. The three Chiefs of Staff are each to have an individual and *collective* responsibility for advising on defence policy, and will together constitute a "Super-Chief of War Staff in commission." It is interesting to note that Major Stoebr advocates the retention of a separate Air Force on the grounds that at the outset of war air supremacy can be secured only by concentrated attacks on enemy aerodromes and aircraft factories, and that all research and experimental work should be under one authority. Here he is at one with the Balfour Sub-Committee which has now decided against the Navy's claim to control its own aircraft. Still even in the absence of a separate Air Force, a combined Navy and Army Staff of the type he postulates should surely be capable of evolving a common air strategy, while inter-departmental committees might be trusted to keep research and experimental work in the right channels.

For the second time in four years the Gold Medal Prize Essay competition of the United Service Institution of India has been won by Colonel F. S. Keen. The essays submitted by Captain M. C. J. Gompertz, I. A. S. C., and Lieutenant F. S. Clarke, 1st Essex Regiment, were selected by the Council for honorable mention. Apart from a reasoned appreciation of new methods and weapons of war, perhaps the outstanding feature of the winning essay is the emphasis given to an aspect of the case too often overlooked. Our enemies on the North-West Frontier are, in fact, British subjects. Hence methods of coercion, such as the use of gas or intensive bombing,—while perhaps militarily the most efficient, though of this we still lack proof—may be politically inexpedient. As Colonel Keen concludes: "coercion must be used as a stepping stone to control."

As a complement to this essay, an anonymous paper which, appeared in July's *Blackwood* is worthy of note. We refer to "The Counter-raiders." Much of "The Counter-raiders" is, of course, frankly fantastic. But, for all that, the writer has the root of the matter in him, and in the more sober passages there is much to provoke thought. Fire and movement. It boils down to that. But, in the conditions peculiar to the North-West Frontier, it is the author's suggestions for obtaining fire and movement which are worthy of attention. For the first he would discard what we may term the "beaten zone" type of fire: he considers it unsuitable in a country where the weight of every round is a factor and targets are fleeting and elusive. He would substitute marksmanship, with limited ammunition; fire well aimed and well controlled, backed by high morale the concomitant of conscious proficiency. Movement he would obtain by the use of every mechanical contrivance for the approach march and supply services, and by intense individual mobility in the fight. In this latter connection his remarks on equipment are interesting. Briefly, the author envisages a specialist corps of super-infantry, who can individually

take on the Pathan at his own game. But his organization differs widely from that of the old Frontier Force, and he has an answer ready for most of the usual arguments against such a specialist corps.

At the end of October last a Staff Exercise was held at home by the Chief of the Imperial General Staff. A detailed report of this exercise was published in December. In April of this year a second and similar exercise was held, the report of which has just reached India. Both these reports are of intense interest. The comments on each phase of the operations, dealing as they do with the correct handling of all arms and of the Air Force, are of the greatest value in keeping the military student in India abreast of current doctrine. We hope to obtain a certain number of these reports for the use of officers who are working for the Staff College, etc.

In pre-war days, The United Service Institution of India supplied tactical schemes to its members, with hints to solutions. A large stock of these schemes still exists. But, whatever they may once have been, they are now completely out of date. And though the demand for up-to-date schemes is almost universal, so far the Institution has, unfortunately, been unable to meet it. The reasons for this failure are two-fold. Firstly, to set a good tactical scheme takes some knowledge, much time, and much labour. And those possessed of the requisite knowledge rarely have the time to spare these days. Secondly, it has not yet been possible to obtain a stock of maps gridded in the now approved fashion. While, obviously, schemes must be based on the type of map in use in examinations. However, these difficulties have now, we hope, both been surmounted, and a supply of schemes should be forthcoming shortly.

The library of the Institution is being completely overhauled, and a new catalogue is under preparation. This catalogue will be available for issue early in 1924. A number of very rare and

curious old books have come to light. We propose to consult the Librarian of the Imperial Library, Calcutta, on the subject of these books, and—if any should appear to be of sufficient interest—afterwards to refer to the British Museum. We hope to give an account of our enquiries in a subsequent issue of the Journal.

In conclusion, we would refer briefly to the financial position of the Institution. A copy of the annual balance sheet is issued with this Journal. But the balance sheets, as a rule, convey little to any but the auditorial mind. Hence the following brief *resumé* of the position may be enlightening. Owing to a recent banking failure, we have—at least temporarily—lost 50% of our working capital. Roundly, our annual income amounts to Rs. 17,000, made up of some Rs. 14,000, in subscription and of a Government Grant of Rs. 3,000. Against this each issue of the Journal now costs us over Rs. 2,000, or some Rs. 9,000 for four issues; while the salary of the staff amounts to some Rs. 6,000: a total of Rs. 15,000. This leaves us a margin of Rs. 3,000 with which to meet all charges in connection with lectures, postage, stationery, etc., to maintain the library, and to pay rates, and taxes. This margin is inadequate.

Now far be it from us to offer an *apologia pro viva nostra*. We are aware, however, that there is a feeling abroad that the Institution has not catered for its members as it might, and that the Journal in the recent past has, on occasion, left something to be desired. We would point out, therefore, that the activities of the Institution are rigidly bounded by its financial limitations. And that the method by which existing members can best express their sense of the Institution's shortcomings is the recruitment of further members; for they will thereby help the Institution's finances and so render improvement possible. If even a proportion of existing members were each to obtain one new recruit, the Institution could maintain the best military and general library in India, and could afford to pay premia for articles on a scale

to compare favourably with rates prevailing in the literary market at home. The very satisfactory list of new members which appears on page ii of the Secretary's notes shows that many old members already realise this fact. But there is urgent need of further recruitment, and ample room for it. Not 30% of the Army in India belongs to the Institution ; while the other Services—including the Auxiliary Force—have hardly been touched. Moreover, scarcely a club in the length and breadth of the land subscribes to the Journal.

GOLD MEDAL PRIZE ESSAY, 1922-23.

By Colonel F. S. Keen, D.S.O., General Staff.

Motto "Festina Lente."

SUBJECT.

"To what extent would the use of the latest scientific and mechanical methods of warfare affect operations on the North-West Frontier of India?"

INTRODUCTORY.

1. Civilised nations owe their military ascendancy over barbarians firstly to the technical appliances which the development of science places at their disposal, secondly to the scientific knowledge which enables them to use these appliances to the best advantage, and thirdly to their ability to organise their resources. It is, therefore, very important that we should study not only the capabilities of the latest scientific developments in operations against the tribesmen on the North-West Frontier of India, but also the best methods of applying the powers which science places within our grasp and the organisation which is calculated to give us the best results from all our resources in co-operation. To the casual observer it might appear that the problem is a military one pure and simple, but this is far from being the case. A close study of the subject shows that in this wild borderland, at least as much as in any other portion of the British Empire, our strategy must be guided and regulated by our policy. Therefore we must take into consideration the political as well as the military effect of such weapons as aerial bombardment and poisonous gas.

In order to arrive at a just estimate of the utility of the developments of science in warfare against the Pathan tribes it is necessary first to understand what our object is in undertaking

operations against them and also to have a clear conception of the problem with which we are faced. I therefore propose to sketch in brief outline the origin of our dealings with the border tribes, the nature and cause of the friction between them and us which necessitates warlike operations, and the object which we should endeavour to attain by means of such operations. I will then give a short description of the terrain and its inhabitants and of the nature of the operations. Having thus formed a clear picture of the proposition before us, I will proceed to the consideration of the means by which that object can best be attained and the assistance we may expect to derive from the latest scientific and mechanical methods of warfare.

HISTORY AND POLICY.

2. When, as a result of the conquest of the Punjab in 1849, we occupied the Peshawar valley and other fertile trans-Indus tracts extending roughly to the present administrative border, it was inevitable that we should come in contact with the inhabitants of the rugged hilly country lying immediately beyond that line. Unable to subsist on the produce of their own sterile country, the struggle for existence compelled them to raid their richer neighbours in the fertile plains and the caravan routes leading from India to Afghanistan. These we were bound to protect, and so the trouble arose and has continued ever since. The quarrel is not of our seeking; indeed it is very much to our interest to keep on good terms with the tribes. The Frontier garrisons and constant expeditions are a serious drain on Indian revenues. Moreover, in the event of our being forced to undertake operations in Afghanistan, our lines of communication must run for many miles through tribal territory, and it lies in their power to compel us to detach large forces for the protection of our convoys, thus diminishing the striking force available for the main operations. In the Afghan war of 1878-79 the hostile tribes lying on both flanks of the Kyber caused us constant annoyance and made necessary several punitive expeditions; whereas on the Quetta line, where the tribes were comparatively well disposed, we experienced practically no trouble

at all. So long as the tribes continue to raid and commit outrages in British territory and to interfere with traffic on the caravan routes, we are bound to punish and coerce them, but in our own interest it should be our policy to avoid any form of coercion that is likely to result in embittering the tribes against us, and anything that we can do to identify their interests with ours and to induce them to side with rather than against us will in the long run be very much to our advantage. Generally speaking it is a principle of war to use all available resources to the utmost extent, and where coercion is the only object in view a nation cannot afford to be squeamish in its methods of warfare. At the same time strategy must go hand in hand with policy, and we should always bear in mind that when we signed the Durand agreement we assumed responsibility for the welfare of the inhabitants as well as rights over their territory; that they are really British subjects, though they may be slow to appreciate that fact. We should realise, as we have perhaps not done in the past, that in fighting the Pathans we are engaging in civil war and that it is to our advantage that our enemies of to-day should be turned into our friends of to-morrow. Only if this proves impossible of achievement should we embark on war *à outrance*, and I do not believe that this stage has been reached, nor indeed that it need ever be reached if only our policy is directed aright. In a word, our coercive measures should always be directed with a view to eventual pacification and control.

THE COUNTRY AND ITS INHABITANTS.

3. So much has been written of late years describing the nature of the country and the characteristics of the Pathans that it seems unnecessary to do more than refer to the salient features of both. A succession of mountain ranges form the backbone of the terrain, and from these run down a tangled mass of rugged precipitous ridges intersected by boulder strewn gorges. Generally speaking the only possible routes for formed bodies of troops and transport lie along these gorges, with an occasional steep pass over some intervening ridge. Save for the roads which we have constructed,

these routes are for the most part mere mule tracks, and considerable work is required to make them passable for carts and even camels. In the neighbourhood of the administrative border the hills are remarkably bare, but in the up-lands of Mahsudland, Tirah and other parts the scrub jungle is so dense as to have a distinct effect on tactics. Water in many parts is extremely scarce. Some of the main valleys are fertile, but the country as a whole is sterile and incapable of producing sufficient food for the inhabitants. The climate is rigorous with extremes of heat and cold at different seasons and an extraordinary daily range of temperature.

The Pathans are the natural outcome of their rigorous surroundings. No weakling has a chance, and only the hardy survive. Reared in an atmosphere of raiding and blood feuds, skilled marksmen and adepts in all the arts of individual warfare, familiar with every stone of their native hills, they have always been formidable foes, and of late years not only have a large number of modern rifles and vast stores of ammunition come into their hands, but their tactics too have improved in a most disconcerting manner. From 1919 onwards we find the Mahsuds carrying out attacks with considerable bodies, the advance and assault scientifically supported by covering fire and executed with great dash and boldness. They, however, possess no artillery, and have not sufficient ammunition to enable them to make use of such automatic small arms as fall into their hands.

FORM OF OPERATIONS.

4. Operations against the tribes take the form either of a rapid counter-raid or of an organised expedition into the territory of the tribe concerned. The objects in both cases are firstly to punish the offenders, secondly to recover captives or property and thirdly to induce good behaviour; in other words, "retribution, reparation, guarantees." The essential factor in carrying out a counter-raid is surprise, and for this reason the more mobile irregular troops, local levies, border police and village "chiggas" are usually employed, though there are instances of effective counter-raids by regular troops, *e.g.*, the capture of Multan near

Peshawar in 1909. A punitive expedition with ground troops is a laborious and costly affair only undertaken when the patience of Government is exhausted by a succession of raids and other outrages. Elaborate preparatory measures as a rule make surprise impossible, and the enemy has ample time to prepare counter-measures and to remove his women and property to neutral territory. Normally, pack transport only can accompany a column in the hills, which reduces at once its mobility and its striking power. The nature of the country necessitates the detachment of troops to guard the flanks at frequent intervals; an operation which in Waziristan in 1919-20 reduced the rate of progress of the striking column, two infantry brigades with four pack batteries and other Divisional troops, to two to four miles a day, with frequent halts to construct permanent piquets, and also reduced the striking force to such an extent that at the battle of Ahnai Tangi in January 1920 the safety of the column was in serious danger. The unwieldy length of the fighting column and the necessity for numerous protective detachments makes co-operation unusually difficult and enhances the importance of inter-communication.

5. It seems, then, that in examining our problem we must bear in mind the following considerations:—

- (1) Policy dictates that our methods of coercion should be such as to lead up to eventual pacification and control.
- (2) From a military point of view the directions in which we most require the aid of science are—
 - (a) Mobility.
 - (b) Striking power.
 - (c) Intercommunication.
 - (d) Security.

LATEST SCIENTIFIC DEVELOPMENTS.

6. It is open to argument what constitute the latest scientific and mechanical methods of warfare. In this essay I propose to consider the developments which have taken place since the commencement of the Great War in 1914.

These may be tabulated as follows :—

- (1) The use of aircraft.
- (2) Ground weapons—
 - (a) Tanks and armoured cars.
 - (b) Mortars and grenades.
 - (c) Artillery.
 - (d) Automatic small arms.
- (3) Chemical warfare—
 - (a) Gas
 - (b) Smoke.
- (4) Wireless telegraphy and radio telephony.
- (5) Mechanical transport.

It is of course true that many of the appliances mentioned have been in use for decades. Automatic small arms were used by the French in 1870, mortars and grenades were in use centuries ago, fell into disuse and were resuscitated in 1914, mechanical transport and wireless telegraphy can no longer be regarded as novelties; but in all cases the progress which has been made since 1914 in their construction and their application to war seem to justify their inclusion. I intend also to consider the question of road making. This cannot by any stretch of imagination be classed as a recent scientific development, but it affects so closely not only the use of many of the appliances referred to, but also the whole question of our relations with the tribes, that without it no discussion of the subject would be complete.

AIRCRAFT.

7. Aircraft surpass all forms of ground troops in their combination of mobility, striking power and invulnerability. The numbers hitherto available for employment on the Frontier have been small, but the results are sufficient to prove that they are capable of producing great effect. The official account of the operations in Waziristan, 1919-20, states (p. 150) that—

“It is impossible to over-estimate the value of aircraft in co-operation with other arms. Their presence alone greatly raised the moral of our troops while correspondingly decreasing that of the

enemy. Aeroplanes when thus employed in tactical co-operation did considerable damage and helped in no small measure towards the success of many of the actions."

Their uses in co-operation with ground troops are—

- (a) Reconnaissance of the enemy.
- (b) Reconnaissance of our own troops.
- (c) Artillery observation.
- (d) Intercommunication.
- (e) Offensive action.

They have also proved their use in carrying out distant reconnaissance and photographic survey. In all these directions the value of aircraft in co-operation with ground troops will continue to increase as further experience is gained and the type of plane and means of intercommunication are improved.

The evolution of the light plane or "Power Glider," as handy on the ground as a motor bicycle and side car and capable of rising from and landing on a much smaller level space than is required for the existing heavier types, promises to be of great value for purposes of reconnaissance. Such a plane could be accommodated in and work from any Frontier post having a small parade ground alongside it. The helicopter, too, will greatly facilitate co-operation with ground troops by enabling a plane to land close to troops in action, on a terraced field or other small level space such as may be found practically everywhere within reach.

8. A subject much discussed in India to-day is whether or not aircraft are capable of carrying out effective operations on the Frontier unaided by ground troops. Their mobility enables them to make a surprise attack on any desired locality without the laborious preliminary measures necessary for a military expedition, and the moral effect of such surprise action is great. In spite of the lack of favourable targets they can with machine guns and bombs produce material effect, killing men and animals and damaging property. Such action results in dislocating the normal life of

the tribes and causes hardship by driving them into cave dwellings and neighbouring territory, scattering flocks, preventing harvesting and other work. If the dropping of gas bombs were permissible, a subject which is discussed later, the effect would be enormously increased as they would have the power of rendering a whole tract temporarily uninhabitable, preventing access to water or effectually blocking a gorge. In fact the punitive power of aeroplanes so armed would be devastating and practically irresistible, provided the objective could be definitely located. Even without the use of gas this power is so great that, where the ultimate object is solely to punish the inhabitants of a definite locality for some outrage, this object can be carried out by air action quickly, effectively and economically, unaided by ground troops. But in Frontier operations as a rule our ultimate object is to control and pacify. To do this it is essential to occupy the country, to get into close personal touch with the people, to make roads and to develop the country. This cannot be done without the aid of ground troops. In France from 1915 onwards artillery bombardment was developed to such an extent as to obliterate the defences and to drive the enemy to ground or to their back areas, yet it is a historical fact that no position was ever won by fire alone. The advance of the infantry was always necessary to confirm and exploit the success of the artillery. Unless and until the contrary is proved it is surely logical to conclude that this will be equally true of aerial bombing.

9. Further, it is impossible to control by punishment alone any living creature, man or woman, horse or dog, still less a virile human community. They may be cowed, they may be destroyed, but they cannot be controlled and pacified. There seems to be a very real danger that single handed intensive and continuous air action will, by driving the inhabitants of the bombarded area from their homes in a state of exasperation, dispersing them among neighbouring clans and tribes with hatred in their hearts at what they consider "unfair" methods of warfare, bring about the exact political results which it is so important in our own interests to avoid, *viz.*, the permanent embitterment and alienation of the frontier tribes. In

the great war the Germans hoped to influence the British nation towards peace by bombarding London and other towns from the air; the result was a hardening of resolve to fight to the end.

10. There is at present little historical evidence of the efficacy of single handed air action. What little there is may be summarised as follows:—

In Somaliland in 1921 (*vide* U. S. I. Journal, April 1923) aeroplanes played a very considerable part in the final route of the "Mad Mullah." The operations commenced with single handed air action which undoubtedly had considerable effect, principally moral. But it was found that the R. A. F. were unable to exploit their own success, and ground troops had to be employed to occupy the Mullah's strongholds and for the pursuit and capture of his following and livestock.

In Iraq the experiment of replacing ground troops by aircraft is being carried out on an extensive scale. The Air Minister stated in Parliament in April last that nine punitive air expeditions had been carried out in Iraq and southern Kurdistan during the previous twelve months, and that the loss of life on both sides had decreased as a result of the substitution of aerial for ground operations. But the experiment still remains an experiment. Its results are not yet apparent, and it can only be judged by results.

In Waziristan there have never been more than two squadrons available. Official and other reports of these operations from 1919 to 1923 show that aerial bombing has on several occasions produced considerable effect though, owing to the lack of favourable targets, this has been more moral than material. In the great majority of cases ground troops have either co-operated or been at hand ready to act if required, and the evidence seems to show that action or threat of action by ground troops is necessary to exploit the success of the punitive action by aircraft and to compel the tribesmen to submit to our terms.

During the negotiations which followed the recent outrage at Kohat a mere demonstration by fifteen planes over the Orakzai

country appears to have had a salutary moral effect and to have influenced the decision of the tribal Jiragh, but a single instance is not sufficient to prove that aircraft can supply all the backing that our political officers require.

These lessons do not seem sufficient to prove the adequacy of aircraft to attain the object in view either from a military or a political point of view. Further experience is required to form a final judgment, but meanwhile it would be folly to dispense with or reduce our well tried infantry and guns until the R. A. F. have proved that they can do without them.

11. Another subject which demands brief consideration is the possibility of aircraft being used to increase the mobility of ground troops. Judging by recent commercial developments it seems highly probable that a plane will be evolved at no distant date capable of transporting a whole platoon with its ammunition, rations and a certain amount of baggage. Unless and until a reliable form of Helicopter is invented, such a plane will probably need a landing ground not less than 500 yards square, a fact which limits very narrowly the possible uses of such planes on the Frontier; moreover, the platoon on arrival would be immobile, unless transport existed at its destination (a most unlikely contingency). It is, however, conceivable that troop-carrying planes will in the future be used for rapidly reinforcing such nodal points as Fort Sandeman, Wana, Dardoni, Thal, Landi Kotal and Chakdara: a development which might enable us safely to reduce our transborder garrisons and to hold more troops in reserve in cantonments. As an instance of the effective use of man-carrying planes, the Air Minister in introducing the Air estimates for the current year in the House of Commons stated that on one occasion in Iraq 300 Indian troops with Lewis guns and 30,000 rounds of reserve ammunition were taken by aeroplane to a district at sixty-five miles distance within twenty-four hours when roads were impassible.

12. To the best of my belief no experiments with airships have yet been carried out in India, and climatic conditions would seem to be unfavourable for their continuous use. They are practically

as mobile as aeroplanes and can carry more men and more bombs, but as far as one can foresee they will always be more vulnerable, both to the weather and the incendiary bullet, at any rate until some reliable non-inflammable gas is brought into use. The housing of airships and storing of gas would be a costly business and on the whole it seems that aeroplanes are far better suited for Frontier use.

TANKS AND ARMoured CARS.

13. Tanks and armoured cars have as common characteristics—

- (a) Great mobility in favourable circumstances.
- (b) Considerable striking power, constant readiness for action and ability to fire while in motion.
- (c) Invulnerability by small arms.

The comparative specification table below shows that the two types of armoured vehicles differ materially in various respects. The specifications are those of an experimental tank recently sent out to India and tested at Peshawar and of the latest pattern of armoured car approved in India.

Details.	Tank (A. T. 2 type) with skeleton body.	Armoured car. Rolls Royce or Crossley.
Weight	7 tons unladen ...	4 tons 15 cwt. fully laden with crew.
Speed	12—16 miles per hour ...	20—50 miles per hour.
Radius of action on petrol tank.	60—90 miles ...	130—200 miles.
Armament	1—3 pr. and 2 or 3 Vickers guns.	2 Vickers guns.
Length	16 ft. 4 in. over all.	
Width	9 ft. 2 in. over all.	
Height	6 ft.	
Track	Coil sprung Life in England 1,000 miles.	
Anticipated capabilities...	Span 5 ft. gap, climb slope of 30°, surmount obstacle 2—3 ft. high.	

While their weight, width and comparatively small radius of action render tanks far less mobile than armoured cars on a good road, yet there are many tracts in the frontier foothills, denied by numerous small nullahs to armoured cars, which should offer no serious obstacle to tanks. From experiments already carried out it seems that tanks could traverse such a route as Idak-Spinwam-Thal. The new spiral sprung track is a great improvement on the old type and gives rise to the hope that a tank may soon be evolved capable of traversing the boulder-strewn bed of a frontier river, such as the Takki Zam or Khyber, without excessive wear and tear. Once this is achieved, tanks are bound to prove an invaluable auxiliary to our troops. Until then their utility will be very limited, since their weight and width must make it impossible to use them to any great extent on a hill road, as they would monopolise the traffic and break the culverts unless specially strengthened.

Tanks are essentially weapons for use in conjunction with other troops. In the attack their rôle is to open the way for the advance of the more vulnerable infantry. As the tribesmen have no artillery, they are practically impervious to counter-attack; they can with impunity go anywhere that the ground permits and can be relied on to maintain ground won so long as their ammunition lasts. At the battle of Ahnai Tangi in January 1920, a section of tanks advancing up the bed of the Takki Zam and taking the Mahsud positions in reverse would surely have rendered General Skeen's task a comparatively simple one. They should also prove of great assistance in an advanced or rearguard action. Their characteristics seem to render them unsuited for distant reconnaissance and independent action generally, and also for escort duties; tasks which can be better performed on the Frontier by the more mobile armoured car.

14. Armoured cars can move on any cart road and in favourable circumstances across country. Their rôle on the Frontier appears to be that of mechanical armoured cavalry. They are particularly valuable for reconnaissance, the pursuit of raiding parties within or

near the administrative border where roads exist, escort duties and the rapid relief of a beleaguered post. Their value for such purposes will be vastly increased when the further development of wireless telegraphy and radio telephony permits of their sending messages by these means. Where the ground is favourable, they can also cooperate usefully in the attack and in a rearguard action. They have already proved their value, notably in 1914—17 in the fighting in the neighbourhood of Shabkadr, where the ground is peculiarly favourable to their use, and in the Afghan war of 1919. In the latter operations their great mobility and durability showed to advantage. In May and June the same cars were used successively in Peshawar city, in the Khyber and Dakka fighting, on the Mohmand border, in the relief of Thal and the reopening of the Kurram route, in the Tochi, and again on the Peshawar border. No other ground arm can approach this record of mobility.

15. An important question for consideration is the most effective organisation of tanks and armoured cars for Frontier operations. Experience indicates that the tactical unit is the section of four tanks or cars, but a company organisation is indicated for administrative purposes. Should these companies be homogeneous units or should they consist of both weapons? A company normally consists of four sections; but from a study of past expeditions it seems that in the biggest of these, *e.g.*, Waziristan, 1919-20, or Tirah, 1897, there was not scope for sixteen tanks, while in the smaller, *e.g.*, the various Mohmand expeditions, four tanks would be ample for our requirements. It follows that, if tanks are organised in homogeneous companies, we shall normally have to break up our organisation by detaching sections for each operation. This is most undesirable, and it would seem best to organise Tank Corps companies consisting of, say, three sections of armoured cars and one section of tanks. A great advantage of this organisation would be that both tanks and armoured cars would be stationed in peace in the neighbourhood of the country over which they would probably be called upon to operate in war, and all ranks would have an

opportunity of becoming familiar with the terrain. To organise homogeneous tank companies would inevitably lead to waste of power in the areas in which they were located and loss of opportunity in other areas.

MORTARS AND GRENADES.

16. I now turn to the consideration of a group of weapons evolved during the trench warfare phase of the Great War, the object of which was to deal with an enemy under cover where he could not be touched by flat trajectory fire, *viz.*, the trench mortar, the rifle and hand grenade. They have as common characteristics a steep angle of descent and an explosive charge. The range and weight of shell vary. There is no doubt that occasions arise fairly frequently in Frontier fighting where such weapons can be used with valuable results. Many of the ridges are crowned with a narrow fin-like outcrop of rock under cover of which the Pathan can defy practically any other form of fire. A historic example is the battle of Dargai in May 1997, where the tribesmen, snugly ensconced in rocky crevices, are believed to have suffered only two or three casualties to our two hundred. In such circumstances trench howitzers and rifle grenades would be most valuable. On the other hand there are several important objections to the adoption of these additional weapons. The most important is their weight. A Stokes Mortar takes a mule to carry it with its base plate and each shell weighs 10 lbs. This seems sufficient to prohibit the use of this weapon with any force equipped with pack transport; the animals required to carry sufficient mortars and ammunition to be of any material assistance would be far better employed in carrying more essential needs. It has recently been decided by the War Office to abolish the Stokes Mortar as an infantry weapon, and this decision seems justified. In any post which has dead ground within close range, a trench mortar would be invaluable; but their use should be confined to this and they should be manned by the Frontier garrison artillery, or better still by the Frontier machine gun companies recommended in paragraph 21 below.

17. Again, if we make every infantry soldier carry a supply of bombs in addition to rifle, bayonet and ammunition, we must sacrifice either an equivalent amount of ammunition or a certain degree of mobility, which latter we certainly cannot afford to lose. Yet the occasions for the use of grenades, hand and rifle, occur so frequently, not only in the attack to dislodge the enemy from behind a knife edged rock, but also to deal with dead ground in the vicinity of a piquet position, that it does seem worth while to have some available for use when required, carried on mules till the occasion can be foreseen. It is probable that a lighter grenade than the Mills will eventually be evolved.

Then there is the question of training our infantry in the use of an increased number of weapons, for we must realise that bombs of all sorts are a positive danger in the hands of a novice. At present our army is still recovering from the effect of the war, and it takes us all our time to train our infantry, British as well as Indian, really effectively in the use of the Vickers and Lewis gun, the rifle and the bayonet. If we are to use hand and rifle grenades effectively and safely, we must train every officer and N.-C.O., and in course of time see that they pass on the training to the rank and file.

ARTILLERY.

18. The Great War brought about considerable development in the armament of artillery as regards range and shell power. As the tribesmen have no artillery, extraordinary range and shell power are of relatively small importance and mobility is the chief consideration. Our pack guns and howitzers combine these qualities satisfactorily. We must of course continue to improve these and also make use of wheeled guns where possible, but anything of the nature of a "big Birtha" is out of place, as the aeroplanes which must observe the fire of such weapons can equally well drop bombs themselves.

19. During the Great War the support of infantry by artillery was developed to a degree hitherto undreamed of. In the attack the infantry were lifted into their objective by the moving barrage and, having gained it, were protected by the box barrage against

counter-attack while they consolidated, the enemy being overwhelmed or driven to earth by the hail of projectiles rained upon him. To produce an effective barrage one gun to twenty-five yards of front is required and a rate of fire of from four to eight rounds per gun per minute. It is at once obvious that in Frontier fighting we shall never have either enough guns or enough ammunition for such methods. To quote from the report of a Staff Exercise held by the C.I.G.S. in October--November, 1922.

"To suggest anything in the nature of an elaborate barrage in mobile warfare is false teaching"

Artillery fire and co-operation with infantry has been and still is being improved by scientific developments, notably aircraft and wireless telegraphy, and will materially assist in maintaining and increasing our ascendancy over the tribesmen, and we must continue by further experiments and by combined training to ensure that we shall reap the full benefit from science, but we must be content to do without the "curtain" of fire evolved in France.

AUTOMATIC SMALL ARMS.

20. The following are extracts from a recent report on the Aldershot experimental brigade:—

"The chief lesson of the Great War was the great, one might almost say the decisive power of the machine gun in the attack and still more in the defence. The light gun is only less formidable."

"With the exception of tanks and possibly gas, the automatic small arm weapon is likely to have a dominating effect on the battle-field."

Where one side only possesses this weapon, it has it in its power to render this domination still more complete, and it seems that our answer to the improved armament and tactics of the tribesmen lies in the development of the use of automatic small arms rather than in trusting too much to new and revolutionary methods of warfare which are still in the experimental stage.

The types with which our army is now equipped are the Vickers, the Hotchkiss and the Lewis. These no doubt are all susceptible of improvement ; in particular we sorely need an infantry weapon that shall be lighter, simpler and more reliable than the Lewis gun. But they are extremely useful weapons and I will now deal with each in turn.

21. The Vickers with its comparatively stable mounting and long range is essentially a weapon for use in an attack or a withdrawal as a second echelon of fire between the rifle and Lewis gun of the platoon and the artillery. In defence, whether of a permanent post or the perimeter of a temporary camp, Vickers guns form the framework on which the defence organisation is built up. Under our present organisation each infantry battalion has a platoon of four Vickers guns as part of its headquarter wing. During the war the organisation evolved as most suitable in all theatres was the machine gun company as part of each infantry brigade. Battalions were formed mainly for administrative purposes. Tactically the company of sixteen guns divided into four self-contained sections was found to be the best organisation. The reversion to battalion guns was, I believe, mainly due to financial stringency. To get the best value from this powerful weapon in attack and defence it is essential that we should insist on thorough training of machine gun platoons, both singly and brigaded.

In my opinion we could with advantage make much more use of Vickers guns for the defence of posts and blockhouses on the Frontier, thereby economising men without loss of efficiency. Surely it would be possible to defend such localities as the Malakand and Chakdara more effectively and more economically than at present by means of Vickers guns in concrete blockhouses so placed as mutually to support one another. The personnel to man these guns might be organised in special Frontier machine gun companies on similar lines to the Frontier Garrison Artillery.

22. I turn now to the light automatic, particularly the Lewis gun. As I have already said, the Lewis gun is no doubt capable of improvement, but as it stands it is an efficient weapon in skilled

hands. In the Frontier hills, opportunities for covering fire at close range from rear or flank exist practically everywhere, and in these conditions, provided the section is well trained and handled, the Lewis gun is capable of providing most effective covering fire for the rifle sections of its platoon, whether in occupying a piquet position or in taking part in an attack, and is equally effective in a withdrawal and on the defensive. We should undoubtedly devote attention to training and tactics as well as to improvements in the weapon itself, if we wish to get full value out of the Lewis gun.

Instructions have recently been issued in India that every cavalry and infantry soldier is to be trained in the light automatic as well as the rifle. This is an important step in the right direction. We must maintain a high standard of individual marksmanship with the rifle and proficiency with the bayonet, while at the same time training the entire personnel of rifle sections as potential reserve light gunners.

As regards organisation, in India a platoon has one Lewis gun whereas at Home it has two. The question of the proportion of Lewis guns to rifles was debated at the Staff Exercise held by the C. I. G. S. in October and November 1922 as regards mobile warfare generally, and the maintenance of two guns per platoon was upheld after considerable discussion. In view of the special circumstances of Frontier warfare, the difficulty of ammunition supply and the constant drain on the bayonet strength of the battalion, the single gun seems to be the more suitable organisation.

CHEMICAL WARFARE.

23. At the Washington Conference, 1921-22, the five Powers there represented bound themselves by treaty to prohibit the use in war of "asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices," as between themselves, and invited all other civilised nations to adhere thereto.

The Pathans are not signatories, neither are they a civilised nation. Therefore we should legally be within our rights in using gas against them. At the same time we have always set our faces against the use against uncivilised foes of appliances which are barred in civilised warfare, *e.g.*, explosive and expansive small bore bullets.

Bearing in mind that our object in dealing with Pathans is coercion with a view to control, we must surely agree that this attitude is correct and that we should studiously avoid any methods of warfare which the tribesmen will inevitably regard as "unfair," and which are practically bound to embitter them against us. Gas is essentially of such a nature. At the same time we should consider the possibility of its use, as we might conceivably find ourselves so placed that we should be forced to employ any means to prevent some recalcitrant tribe from harassing our line of communication in operations beyond the Frontier. For such a purpose aeroplanes armed with gas bombs would be peculiarly effective, especially in a country where water only exists in certain known localities, as they could undoubtedly render those localities temporarily uninhabitable, and thus keep the tribesmen at a distance. In such a case the use of gas might be excusable, but we should avoid it if possible, and if we did decide to employ it, should give notice of our intention so as to give the women and children time to go elsewhere.

24. Such experiments as have been carried out in India with smoke indicate that the atmospheric conditions render it far less effective than in Europe. It is of course quite possible that the difficulty will be overcome in course of time, but will the advantage gained by the power of concealing our troops in the attack by means of a smoke screen compensate for the transport required in the smoke shell or other appliances? I am most emphatically of opinion that available transport will always be better employed in carrying more essential commodities.

WIRELESS TELEGRAPHY AND TELEPHONY.

25. In any form of warfare it is almost impossible to exaggerate the vital importance of perfecting means of inter-communication. On the Frontier, both in war and peace, detachments are so numerous as to be the rule rather than the exception. For this reason we should spare neither pains in devising nor money in providing the most suitable appliances for the dissemination of timely information among all units and detached sub-units. Science has made great progress in this direction of recent years, and it seems certain

that in the near future wireless telegraphy and radio telephony will entirely supersede the more vulnerable and limited airline and cable. That clumsy but useful device, visual signalling, will no doubt be required to supplement wireless for some time to come, but it seems highly probable that the further progress of science will eventually render visual obsolete. The pack wireless set with which our signal units are equipped dates from 1911, it has a useful range of 50—100 miles, but is clumsy and unreliable. A far more efficient set (C. C. W.) has been evolved, and it would be false economy not to provide this equipment on a liberal scale as soon as it can be manufactured. A battalion set with a radius of five miles has also been evolved, and these should be provided on a scale to equip every detached company, permanent piquet and other detachment.

Concerts, public speeches, etc., are now "broadcasted" by radio telephony in Europe and America, and it surely is no extravagant flight of fancy to foresee the day when every Brigade Headquarters, every aeroplane, every section of armoured cars and every Frontier outpost will be equipped with apparatus capable of broadcasting telephonic messages to a distance of a hundred miles, and every battalion and equivalent unit, every L. of C. post and blockhouse with a receiving set, possibly also capable of sending up to say five miles. It is easy to see how this would facilitate co-operation between bodies of troops working in neighbouring valleys, the conveyance of warning regarding impending attacks and information of the movements of raiding gangs. On the Frontier the risk of such messages being read by the enemy does not exist. The language difficulty, though puzzling, should not prove insuperable.

MECHANICAL TRANSPORT.

26. Given passable roads and suitable types of vehicle, mechanical transport adds enormously to the mobility and striking power of the fighting troops by increasing their radius of action and reducing escorts and protective detachments. One can hardly imagine that vehicles will be evolved in the near future capable of accompanying the slow-moving fighting columns, and it is probable that we shall have to be content with pack and draft for regimental transport

and train for many years to come. But if we make a point of constructing roads in rear of the columns, capable in the first instance of taking Ford vans, or some similar light car, and of gradually improving the gradient and the surface and strengthening the bridges to take 30 cwt. or 3 ton lorries, as has been consistently done in Waziristan since 1919, we greatly simplify the problems of supply, evacuation of sick and wounded and L. of C. defence. The useful load of the Ford van is approximately the same as that of a mule or bullock cart on the same type of road, but it can cover quite six times the distance in a day and does far less damage to the road surface. The heavy lorries are progressively economical as regards loads, but of course require stronger bridges and a firmer surface. To stand continuous lorry traffic a road must be properly metalled. Vans and lorries have been used with great success along the administrative border to carry troops rapidly and secretly to the objective of a counter-raid, thus facilitating surprise. Money spent on providing motor transport for use on the Frontier is a very sound investment, and to reduce the number of vehicles to the bare minimum required for immediate use is false economy.

ROADS.

27. The subject of roads is not irrelevant in a discussion of the utility of the latest scientific developments, because good roads are essential if we are to reap the full benefit from mechanical vehicles. More important even than this is the effect of roads on our relations with, and control of, the tribes through whose territory they run. They open up the country to trade, and their contruction and upkeep give lucrative employment to the inhabitants, thus, in the words of John Jacob, "diverting their acquisitiveness from predatory into peaceful channels."

They enable our political officers to establish that close personal touch with the tribesmen which is so essential to mutual good will. Lord Roberts (41 years in India) wrote as follows in 1886, and his words are as true to-day as they were then :—

"Meanwhile I would push on our communications with all possible speed; we must have roads, and we must

have railways; they cannot be made on short notice, and every rupee spent on them now will repay us tenfold hereafter. Nothing will tend to secure the safety of the frontier so much as the power of rapidly concentrating troops on any threatened point, and nothing will strengthen our military position more than to open out the country and improve our relations with the Frontier tribes. There are no better civilisers than roads and railways; and although some of those recommended to be made may never be required for military purposes, they will be of the greatest assistance to the civil power in the administration of the country."

Let the policy of road making once be fairly established in any district and the Pathans quickly realise their value to themselves, as witness the Swat valley. The Khyber Afridis are now busily building the Khyber railway, and seem to be giving us less trouble than their wont. The latest inter-tribal fighting reported in that area was due to jealousy over the distribution of work among the sections. I believe that signs are not wanting that even the truculent Mahsud is beginning to encourage the construction of more roads in his country. In my opinion we should make it our definite and settled policy, wherever we go into tribal territory, to construct motor roads, exactly as we are now doing in Waziristan. If we can gradually extend a network of roads up to the Durand line, the result in course of time will be that the interests of the Pathans will be more and more bound up with ours. Owing to the improved economic conditions, raiding and retaliation and the resultant ill-feeling will gradually cease. This will save the Indian budget many lakhs a year in peace, and in the event of war beyond the North-West Frontier our lines of communication will be infinitely more secure than at present.

CONCLUSION.

29. Since the Great War men of vision have prophesied that armies and surface fleets are things of the past, that future wars will be fought in the air and under the sea, the only land weapon destined to survive being the amphibious tank. It is of course

necessary to exercise vision in forecasting the form of future warfare and to explore the possibilities of the new weapons and methods evolved by science, both single handed and in conjunction with each other and with those we already possess. But we must not allow ourselves to be led into the error of pinning our faith to revolutionary developments and superseding well tried arms and weapons by others which have not yet proved conclusively that they can perform all that is claimed for them. When such questions arise as the replacing of ground troops by aeroplanes we must "hasten slowly." For centuries past cavalry, infantry and artillery have been found essential for the winning of battles. We know that our infantry, as at present organised and equipped, if well trained, well led and adequately supported by artillery, can go anywhere and accomplish anything in reason on the Frontier. The day may dawn when we shall be able to dispense with these arms, but emphatically the time is not yet. Meanwhile there is ample scope to apply the developments of science, aerial warfare, wireless telegraphy and telephony, mechanical vehicles armed and unarmed, in co-operation with and as most valuable auxiliaries to the more prosaic forces which will inevitably bear the brunt of the fighting for generations to come.

As science progresses, combined training becomes increasingly important to the attainment of efficiency, and we must recognise that ground troops that have not been trained in co-operation with aircraft, and pilots and observers who have not learned to work with infantry and artillery, are but half trained; also that the means of inter-communication and transportation that will be used in war must be made available for training. To grudge a lakh so spent in peace may well involve the expenditure of a crore of rupees and the waste of many human lives in war.

Finally, when adopting new weapons and new methods we must be careful that, in achieving the purely military object, they do not endanger the still more important political object which we must always keep in view. Coercion must be used as a stepping stone to control.

THE BATTLE OF HANNAH. •

21ST JANUARY 1916.

*By Major-General Sir W. D. Bird,
K.B.E., C.B., C.M.G., D.S.O.*

(This narrative is a sequel to the accounts of the battles of Shaikh Saad and Wadi which have already been published in this Journal. It is based on the War Diaries, to which I was most kindly permitted to have access. I was also able to consult "My Campaign in Mesopotamia" by Major-General Sir Charles Townshend.)

Although some reports had been sent on the 13th January 1916, to General Townshend in Kut-al-Amarah, and to General Sir John Nixon at Basrah during the turmoil of the battle of Wadi, General Aylmer had necessarily ceased to forward frequent and detailed reports either to the 6th Division or to General Headquarters; and both had, in consequence, become somewhat impatient over the comparative absence of information from the front. On the afternoon of the 14th January Townshend had telegraphed to General Aylmer news that columns of artillery, followed by infantry, were marching westwards up the left bank of the Tigris, which appeared, he said, to betoken that the Turks were not taking up the position at Es Sinn, but were in retreat. On the morning of the 15th he telegraphed that the enemy were encamped as usual, but might retreat during the 16th, that our gun-boats had not yet come into sight, that it was presumed that the relieving force was opposed by a strong rear guard, and that it was hoped that the Turks would not change their minds and return to the positions on the left bank opposite to the Es Sinn banks. It seems that this message was crossed by a telegram from Aylmer, who necessarily was in a far better position to make a just estimate

as to the significance of the enemy's operations than was General Townshend; and in this the commander of the Tigris Corps pointed out that the Turkish troops which had been seen by the garrison were probably marching to their bridge at the Abu Dhakhar bend of the Tigris, and asked that a sharp lookout might be kept for enemy movements on the right bank of the river. (Map 1.)

Heavy rain had meanwhile commenced in the evening of the 14th January, and the 15th was again a day of chilling gale and driving rain. As a result the bridge of boats over the Tigris that was being made by the British above the mouth of the Wadi could not be completed, aerial reconnaissance was impracticable, and the British troops—the 7th Division, the 9th and 28th infantry Brigades, the Cavalry Brigade, etc.—remained facing the defile at Hannah, and on the left bank of the Tigris in the areas opposite to Orah, very much in the positions that had been held on the 14th; but a detachment on the right bank consisting of the 1/1st Gurkhas, the 93rd, two guns of the 23rd Mountain Battery and one squadron of the 33rd Cavalry secured the shipping and camps from Arab sharp-shooters.

During the 15th January a couple of telegrams were sent to General Headquarters, and repeated to General Townshend, describing the situation at the front. In the first Aylmer observed that the reports from Townshend indicated clearly that the Turks intended to delay the British in the long Hannah-Sannaiyat defile. They would then probably bring a large force down the right bank for the purpose of fighting a battle at Es Sinn, or further down the river, and severing the communications of the British with Basrah. In order that the Tigris Corps might be in a position to meet the enemy on the right bank a bridge was made over the Tigris, and when completed all troops, except those belonging to the 7th Division (commanded by Major-General Sir G. Young-husband) would be moved over the river. In the second message the number of casualties (1,613) that had been experienced at the battle of Wadi, and the disabling of the gun-boat *Gadfly* by a shell, were mentioned. (For order of battle, see Appendix.)

This statement did not apparently satisfy General Townshend, for he telegraphed on the 16th that the guns which had been seen were four quick-firers, six 16-pounders and two others, and also furnished a list of their wagons. The presence of stragglers and wounded, it was pointed out, gave the troops the appearance of a defeated, not a manœuvring, force. The losses of the enemy, also, could, he said, not have been less than those of the British, and it was entirely foreign to the nature of the Turk, or to that of the troops of any other nation, to march 27 miles in retreat and then cross a river for the purpose of fighting again. Finally the opinion was hazarded that the enemy's units had not been ferried from the right to the left bank of the Tigris after the battle of Shaikh Saad and that the 6 battalions which had opposed Kember's 28th Brigade in this battle were still south of the river. It was suggested, in addition, that operations along the right bank of the Tigris afforded a better chance of victory than did those on the left bank.

Before this some plain speaking had also been taking place between Kut-al-Amarah and the Tigris Corps on the wireless. At 9 P.M. on the 15th January a message had been received from General Townshend who expressed himself as deeply concerned that no news of the movements of the relieving force had reached Kut-al-Amarah since 11-35 A.M. on the 14th. The 15th January had been reached, and this was the date beyond which Aylmer had himself stated that it would be hazardous to expect the garrison to hold out. Townshend then complained that he had shut himself up in Kut-al-Amarah on the understanding that the place was to be relieved in a month, but the garrison had now been invested for six weeks. After remarking that it had been understood that the enemy had been driven from their positions on the Wadi early on the 14th, he ended the message with the supposition that the Turks were fighting actions to gain time for the arrival of reinforcements. Later on Townshend again telegraphed in response to an enquiry from Sir John Nixon, that the siege of Kut had now been converted into a blockade investment. The

area on the right bank of the Tigris facing the eastern front of the place had practically been denuded of troops. Enemy camel-men had been seen on the left bank opposite to the Sinn ridge (banks) throughout the day. A large camp had appeared in the evening near the Dujailah canal on the right bank, and the attempts of the Turks to construct a bridge over the Hai at the point about two and a half miles to the south of Kut al Amarah had been stopped by our gun fire. Large convoys had gone north and west but not east from the camp on the left bank at the Shumran bend.

At about midnight General Aylmer unburdened his mind both to General Headquarters and to Townshend as follows* :—

“The position of affairs must be frankly faced. The enemy is blocking the entrance of the Wadi-Nakhailat defile with very strong works, and, judging from his dispositions within them, they have been designed to resist a big bombardment from across the river as well as attack in front. His bivouac shelters seem to indicate that he may have with him the whole 52nd Division, and two regiments (six battalions) of the 35th and 38th Divisions, but of course I cannot be certain of this. Emplacements for nineteen guns have been seen, eleven of which are designed to fire across the river. Behind the defile there is a single line of entrenchments through the Y of Sannaiyat between the marsh and river, probably one and a half miles long. Behind again is the Es Sinn position. It is impossible, in my opinion, to take this first position by a *coup-de-main* from this side alone without losing half the force. It is my intention to cross the 3rd Division (now formed under Major-General H. D’U. Keary, who had reached the front with his staff on the 14th January) and Cavalry Brigade to the right bank

* This telegram is quoted in “My Campaign in Mesopotamia,” Major-General Sir C. Townshend.

The Battle of Hannah.

directly the bridge is finished, and thus enfilade the enemy's position. Even by this means I do not think that progress as an entire force can be anything but very slow. Information indicates that reinforcements* may have begun to arrive at Kut, and these may soon amount to a considerable number. On the right bank below Kut at present there do not seem to be at the outside more than 2,000 men and rain is evidently rendering Hai crossing difficult for transport. The best plan seems to me for Townshend to cross the river during the night with such able bodied men as he has got in mahailas (barges) or other river transport available, and march well round the Es Sinn position on the right bank. I would cross one division and cavalry brigade at the same time and march to meet him and bring him back here. The opportunity is now favourable and may cease directly the enemy sends troops down the right bank which may be very soon. On the 20th December Townshend informed me that he had fifty mahailas besides other river craft. If these still exist it should be about sufficient for his purpose though he would have to leave sick unable to march and destroy his guns and material. If Townshend thinks this possible I shall issue orders† for him to do so. The Commander, 6th Division, is requested to wire at once feasibility of passage and earliest date he can be ready, remembering opportunity may not recur."

* The enemy's army on the Tigris was thought to be under the command of Khalil Pasha, and to comprise the 13th Corps composed of the amalgamated 35th and 38th Arab Divisions, officered by Turks, and the 52nd, a Turkish Division, the Corps being commanded by Ali Najib Bey; and the 18th Corps made up of the 45th, a Turko-Arab Division, and the 51st, a Turkish Division. Reinforcements, probably one division, were said to be moving to the Tigris front from Baghdad, and further reinforcements were, it was supposed, being sent from Aleppo.

† The troops in Kut-al-Amarah had been placed under the orders of General Aylmer for certain purposes.

General Headquarters took but little time for the consideration of this proposal, and early on the 17th Sir John Nixon telegraphed both to Aylmer and Townshend as follows* :—

“I do not in any way agree with your appreciation of the situation or that the same calls for Townshend to take the extreme step that you propose. The only circumstance that could, in my opinion, justify this course would be the demoralisation of your force which I have no reason to suspect. You have been opposed from Shaikh Saad by the 35th and 38th and 52nd Divisions, some gendarmerie and cavalry, totalling over 15,000 with at the outside 41 guns, and you have twice defeated them. Townshend has been contained by the 45th and 51st Divisions totalling 8,000 with 17 guns. Townshend has reported a strong column estimated at one division and 13 guns retiring to the main camp west of Kut. The enemy have suffered losses estimated by you at 4,500 at Shaikh Said and 2,000 at Wadi. You therefore should have between you and Kut not more than 5,000 with possibly 27 guns. The total of your losses (about 5,620 men) should almost have been made up by reinforcing units. Your bridge gives you freedom of manœuvre. The course you originally proposed, namely, to employ part of your force on right bank, should not only promise success but afford you opportunity of inflicting a severe blow on the enemy and effecting the speedy relief of Townshend. I cannot believe that the position in front of you can equal in strength those attacked and captured by us in the past which had been in preparation for four months. The course you now propose for Townshend

* This telegram is quoted in “My Campaign in Mesopotamia,” Major-General Sir C. Townshend.

in your telegram under reply would be disastrous from every point of view to Townshend's force, to your force, to the whole force in Mesopotamia and to the Empire, and I cannot sanction it. There is no reason to suppose the enemy has been reinforced by a sixth division, and the possible arrival of it only emphasises the necessity for action."

General Townshend's reply to General Aylmer began with the assumption that the latter would advance on the right bank with a maximum force leaving a minimum detachment on the left bank for the purpose of securing the shipping on which the British were dependent both for supplies and munitions; for, in his opinion, the Turks would not be in a position to undertake an offensive on the left bank so long as the British held Kut-al-Amarah. He then pointed out that it would not be possible for the troops in Kut-al-Amarah to gain the right bank of the Tigris with rapidity and security unless the relieving force were in position to the South of the place; and here the Hai, which was now five feet deep at the fords, would lie between the British and the enemy. It was added that, while 4,000 men could be ferried over the Tigris in one night, twenty hours would be required for the passage of guns, and seventy-five hours for that of the chargers and transport and other animals belonging to the troops of the garrison.

This telegram produced a considerable correspondence as to whether Kut should or should not be evacuated after the two British forces had joined hands; and in the course of this correspondence Townshend stated that a sortie in force as originally contemplated by Aylmer would, in his judgment, lead to the destruction of the men who had crossed the river, as soon as day dawned. In the end Nixon laid down that the British should re-establish and hold the position at Kut-al-Amarah after its relief; that the abandonment of the place, and its guns, stores, etc., would be destructive to prestige and was quite uncalled

for; that the forces under Aylmer and Townshend should be able after the relief to maintain themselves at Kut pending the arrival of reinforcements; and that, by the first week in February, including the garrison of Kut-al-Amarah, four full divisions would be available for an offensive with a view to securing a permanent position to the west of and covering the town. Townshend was, further, to submit proposals as to the manner in which the Tigris Corps could best be disposed after the arrival of the relieving force at Kut, so as to fit in with this plan of operations.

The settlement of this matter did not, however, affect the immediate problem facing the British commanders, which, as is common in war, was one involving a decision in regard to the use that could best be made of time. To make this decision would involve in the first place an accurate adjustment of thoughts to things. This is never easy of attainment, and is particularly difficult when in the field, for the reason that to bring thoughts into correct correspondence with things requires that the whole of the factors materially affecting the situation should be known, which can rarely be the case; and also because of the influence that is exercised on thought by emotions that can never readily be controlled and are, of necessity, much agitated when on service. The fact that the responsibility for reaching a decision rested to some extent with three separate authorities, rather than with one central authority, would also militate against the formation of a sound judgment; for a proper conclusion could only be reached after weighing such factors as the conditions prevalent at the front and the practicability of forcing the enemy's position at Hannah; the power of endurance possessed by the garrison of Kut-al-Amarah; the rate at which reinforcements could reach the British and Turkish armies—the evacuation of Helles by the British had, it may be noted, now set free Turkish forces which were previously holding the Gallipoli peninsula, but a Russian detachment was advancing on Hamadan through Persia; and the

possibility that the enemy might throw up entrenchments which would be impregnable to any army that could be collected and maintained by the British in the interval before the troops in Kut-al-Amarah would either be starved into surrender, or the country would be inundated by the arrival of floods caused by the melting of the snow in the Armenian and Persian highlands.

It is also not improbable that neither Sir John Nixon, nor Sir Fenton Aylmer, nor General Townshend was with reference to mood and environment well situated for making, or assisting to make, this important decision. Sir John was in bad health; he had accepted a heavy responsibility as regards the occupation and retention of Kut-al-Amarah; and he could hardly be expected to appreciate to the full the great physical difficulties that now faced General Aylmer, unless he either himself proceeded to the front or sent the senior officer of his General Staff to report on the situation at Wadi. Nor does General Nixon seem to have realised how large was the difference in efficiency between the gallant but inexperienced force that was now opposing Turkish troops of better quality than had been encountered by the British in Mesopotamia prior to the battle of Ctesiphon, and the British veterans of the earlier stages of the campaign. Of all our senses the eyes are said to be most easily vanquished by events, and since what is seen reacts at once on emotion and thought, General Aylmer, who must have been very conscious of the visible difficulties of his position, may have been inclined to regard the situation as being darker than was actually the case. Further, he had been overwhelmed with the work of organising, almost single handed, his corps, and had been harassed and disappointed by the occurrence in battle of incidents due to its shortcomings. Townshend was naturally anxious as to the future of the garrison of Kut-al-Amarah, and annoyed that his confident anticipations of early relief had not been fulfilled; and his conclusions, therefore, were likely to be swayed as much by these feelings as by other considerations.

It may be, then, that General Townshend expected too much and was prepared to give too little; that General Aylmer was unduly depressed; and that Sir John Nixon was inclined to adopt too sanguine a view of the situation, especially as regards the numbers that were resisting the British, for the Turks would hardly make all their effective movements up and down the Tigris in full sight of the garrison of Kut-al-Amarah. But whether this was or was not the case, the question was one demanding intense and cool reflection, and Sir John Nixon's telegram of the 17th was not at all calculated to produce a mental attitude favourable for these on the part of Sir Fenton Aylmer.

The bridge over the Tigris after having been completed had meanwhile been broken by one of the steamers which had been carried against it by wind and current. During the 16th January repairs could not be effected owing both to the continuance of gales and bad weather, and to the exhaustion of the little group of Sappers and Miners. The surface of the plain had now become so sodden and heavy as to be barely traversable by infantry, and to cover even a short distance involved considerable exertion. Exposure to cold winds and rain was also telling on the health of the force, whose fighting strength, as regards infantry, did not at the moment exceed 9,000 men. At Kut-al-Amarah too the troops in the trenches had been standing waist deep in water, and some men had even succumbed to the hardships to which they had been subjected.

The bad weather had unfortunately also the effect of checking the movements of the whole of the reinforcements and drafts that were on the march from Basrah. On the 16th January there were for instance, more than 1,000 Indian drafts who were held up at Amarah; the 3rd Sappers and Miners, the 59th Scinde Rifles, the 89th Punjabis, certain Ambulance units and about 400 British and 350 Indian drafts were obliged to halt between Amarah and Kur nah; the 1/6th Devonshire Regiment, the 26th Punjabis and 165

Indian drafts had been forced to remain at Kurnah; and at Gurmat Ali there were the 1st Battalion of the Highland Light Infantry, the 34th Sikh Pioneers, the 21st Sappers and Miners, one section of the 23rd Mountain Battery, 1,850 British and 1,900 Indian drafts besides Ambulance and Veterinary units. (Map 2.) Some delay occurred likewise in the movements of the river steamers carrying other units such as the 47th Sikhs and 27th Punjabis, but fortunately two companies of the 1st Battalion Manchester Regiment and the 1st Battalion of the Connaught Rangers reached the front on the 19th January.

The troops facing Hannah had continued their efforts to advance in spite of storm and rain, and the 19th and 35th Infantry Brigades had been able to push their trenches somewhat nearer to those of the enemy. There was no material change in the dispositions of the remainder of the Tigris Corps, which lay to the West of the Wadi, except that the detachment on the right bank of the Tigris had now been joined by the 1/9th Gurkhas. Nor did the information obtained in a couple of reconnaissances by air reveal much alteration in those of the enemy.

General Townshend sent a report on the evening of the 16th January to the effect that a large convoy had moved eastwards along the left bank of the Tigris, that digging on this bank was in progress below Kut-al-Amarah, and that wire entanglements were being erected in front of the new trenches. He also conveyed to General Aylmer the important news that rations were still available in Kut-al-Amarah for 21 days for British troops, and for Indian troops for 17 days. There was fodder for 5 days, meat on the hoof for 17 days and 3 days' supply of tinned meat.

So far as the question of food was concerned, the relief of the garrison was, therefore, not a matter of great urgency. In view of the other factors mentioned above, such as the possibility that the Turks would soon receive reinforcements; and that if the British paused in their advance time would be allowed to the enemy for the

strengthening of their positions and improvement of communications ; it was, however, apparently considered by General Headquarters that further efforts must at once be made to effect an early junction between the two British forces, the Tigris Corps and garrison of Kut-al-Amarah. On the 18th, in replying to a long telegram from General Aylmer in which reference was made to the effect that the bridge had again been broken on the 17th, and that the meteorological conditions were extraordinarily unfavourable, it was consequently remarked that: "The Army Commander * recognises the difficulties caused by the prevalence of bad weather, but can you give no estimate as to when you will be able to continue the offensive and your plans for the same ? Conditions must make the enemy's supply question very difficult and should prevent withdrawal of his guns. Have you made any progress on the right bank ?"

This telegram provoked a reply to the effect that heavy rain had continued throughout the night of the 17-18th, and that the combination of a strong current and violent gale had again caused the bridge to break. Shortage of bridging material and the unseaworthiness of the native boats would hinder repairs, and it was therefore probable that operations would have to be undertaken by the British without liberty of manœuvre between the two banks of the Tigris. Troops would, however, be transferred to the right bank by steamer and barge, and already three battalions with four mountain guns were on this side of the river. Orders had been issued that the 7th Division was to close on to the enemy's positions, and these would be subjected to bombardment with high explosive shell and shrapnel from both banks on the 19th and night of the 19-20th. An assault would be delivered by the 7th Division on the 20th against the portion of the position closing the mouth of the Hannah defile which lay nearer to the Tigris. This plan was approved by the Commander-in Chief,

* General Sir John Nixon was ~~in~~invalided on the 18th January.

who in consequence accepted responsibility for its general efficiency. Owing to continuance of unfavourable weather it was not carried out until the 21st January, and ample time therefore was allowed to the Turks for the strengthening of their entrenchments.

Before dealing with the tactical alternatives that were open to General Aylmer, an attempt must be made to describe the special characteristics of the battle-field. Mirage, accompanied by a haze of dust blown up by the wind, is not uncommon under the hot sun of tropical plains, but nowhere in the world are these phenomena more constant and disconcerting, than on the great flat lands of Irak. On the other hand such storms of rain as were being experienced, often in the winter convert the plain for a short period into an almost impassable morass, and banish for a time both mirage and dust. In the area near Kut-al-Amarah the course of the Tigris, a river as wide and deep as is the Thames at Westminster, is slightly above the monotonous level of the surrounding country and, in the localities where inconvenient inundations would occur during the season when the stream is in flood, dykes had been thrown up along its banks for the purpose of controlling the water. Where this had been done on one bank only, as was the case with the right bank to the west of Hannah, some command was obtained over the ground on the other bank. Conversely the whole country is so flat that even a small bank defilades much of the surface of the ground behind it; and if a dyke existed on the Turkish bank the area near the river would therefore be dead to direct fire from the British bank, and *vice versa*. Both sides endeavoured to overcome this difficulty by using indirect fire controlled either from some of the low mounds which were to be found in places on the banks of the Tigris, or from artificial observing points such as a scaffold, ladder or mast; and to counteract the indirect fire of the British the Turks dug deep well-traversed trenches in the easy stoneless soil. Another peculiarity of the area was that the upper portions of the

banks of the Tigris were honeycombed with channels and canals, so constructed that, unless held up by dams, the flood water would be carried from the river on to the neighbouring lands. A series of covered and parallel ways, with depths varying from five to six feet or more near the river to ground level at the end of the channels, were therefore available for both armies. About a mile from the left bank of the Tigris at Hannah and extending westwards almost parallel with its course as far as Kut-al-Amarah, lay the great Suwaikiyah marsh. Like most of these swamps it was shallow and not impassable by men on foot, although much traffic would soon churn up a heavy mud; but the marsh was surrounded by a space filled with holding slime, and the water was liable to be carried to and fro over the plain by the wind.

The enemy's position at Hannah extended in a double line of entrenchments across the defile for 1,300 yards between the Tigris and the marsh, the whole front being covered by wire entanglements. Both lines were then bent backwards on the left so as to face the marsh for a distance of about 2,000 yards, but on the right there was a single line of trench for about a mile and a half along the left bank of the Tigris. Gun emplacements in three groups, two each for four guns and one for three guns had been located by the British on the river front, there was an emplacement for four guns on the outer flank of the lines that faced the marsh, and subsequently another was built for a single gun behind the right centre of the fortifications which closed the space between the marsh and the river. From this information, it might, as had already been pointed out by General Aylmer, be inferred that the enemy were fully prepared not only for some such plan of attack as that which had been drawn up by the British commander, but had also considered the possibility of an attempt to envelop their left. (Map 3.)

One of the great advantages possessed by forces which are attacking is this, that until the design of their operations has

been unfolded, the defenders cannot be sure to what extent preliminary measures, such as the movement of troops made by the British over the Tigris, are intended to mislead; or will be followed by such operations as an advance westwards, or by an attempt to repass the river between Hannah and Falahiyah. It does not appear, however, as if General Aylmer had in mind, on this occasion, any steps definitely calculated to mislead the enemy; except that the attack would be made along the total frontage between the river and marsh, although only delivered in greatest force against the right half of the position. On the other hand their narrow battle frontage would enable the Turks, even if at first they were kept in doubt, rapidly to reinforce any portion of their line that was in peril. The battle, then, if won at all by the British, was to be gained by hard hitting, and tactical methods would be employed for which the enemy were not unprepared; and although the British possessed the power of subjecting the Turkish positions to fire from two directions, this advantage would to some extent be modified both by the topography of the battle field and by the enemy's entrenchments.

It is true that battles are rarely gained by subtle manœuvre that is unbacked by stiff fighting, but victory may be greatly facilitated by dealing either at first, or later in the action, an unexpected and consequently most telling blow. There was certainly but little scope for manœuvre in the circumstances in which General Aylmer was placed, but there have been occasions on which commanders have been able to turn to advantage, for the achievement of their purpose, the presence of physical obstacles which appeared to be impassable; and in this instance the Turks by their dispositions had apparently given a hint that an attack either over the Tigris to the west of Hannah where, as has been stated the left bank is commanded by the right, or across the Suwaikiyah marsh, was not altogether out of the question. As regards the former the difficulties of moving boats either up river or overland to suitable points of passage were perhaps insuperable,

and a sudden rise in the level of the water, brought about by heavy rainfall, might dislocate such arrangements as had been made to pass troops over the river. In all the fighting that took place before the fall of Kut-al-Amarah on the 29th April the British made no attempt to deliver an attack across the Suwaikiyah marsh, although, on the 25th February, infantry did move over it for the purpose of demonstrating against the Turkish left at Hannah. The delivery of an attack across the marsh may, therefore, be considered as impracticable, and Almer's general plan, perhaps with the addition of a feint of crossing the Suwaikiyah, must hold the field.

On the 19th January the weather at last cleared, the troops were able to dry their sodden clothes, and the bridge over the Tigris was restored. It was ascertained in the course of an aerial reconnaissance that entrenchment was in progress at Sannaiyat, but no other information of importance was obtained in regard to the enemy. During the previous night the 35th Infantry Brigade, under Brigadier-General G. H. B. Rice, had, in accordance with orders issued by the Tigris Corps, succeeded in advancing 250 yards, and had entrenched under heavy fire in localities about 1,300 yards from the Turkish position, but close to the line held by their picquets. The 19th Infantry Brigade, Brigadier-General A. B. Harvey, which had made more ground on the right flank, was now from 600 to 900 yards from the enemy's lines, and the 21st Infantry Brigade, Brigadier-General C. E. de M. Norie, had occupied the trenches that had been held by the others. The 20th, 28th and 1/1st Sussex Field Batteries, the 72nd and 77th Howitzer Batteries, the 61st Field Howitzer Battery (less one section) and the two guns of the 104th Heavy Battery, were in position from which to support the attack; and together with the gun-boats they had carried out ranging on the enemy's lines. In addition the 9th Infantry Brigade of the 3rd Division, now comprising the 1/4th Hampshire, the 1st Connaught Rangers,

the 62nd Punjabis and the 107th Pioneers, under Major-General R. G. Egerton, had been placed under the orders of the commander of the 7th Division for the coming battle.

Meanwhile the troops that were on the right bank under General Keary had been joined, during the night of the 18/19th, by a second squadron of the 33rd Cavalry, the remaining section of the 2nd Mountain Battery and two companies of the Manchester Regiment; and later on were also reinforced by one section of Sd. Battery Horse Artillery. In pursuance of General Aylmer's plan of attack, and in order to gain positions from which the enemy's lines could be taken in enfilade, General Keary made a movement westwards on the 19th. Early in the day the two squadrons of the 33rd advanced, with one section of the 23rd Mountain Battery, in a south-westerly direction to feel for the enemy. At 10 A.M. the bulk of the 9th Infantry Brigade, which had been formed after the battle of Wadi, namely, the 1/1st and 1/9th Gurkhas and one company of the Manchester Regiment, together with the second section of the 23rd Mountain Battery, the whole being under the command of Lieutenant-Colonel L. W. Y. Campbell, marched towards an Arab village lying about three miles away and on the other side of a loop of the Tigris not far from the Sannah canal, and almost in rear of the Turkish position. At the same time the 93rd were despatched to the top of the loop for the purpose of gaining a position in prolongation of the enemy's front line.

The advance of Campbell's force was made with due caution, as it was not known whether the village was or was not held, by the enemy; and at noon the advanced guard, consisting of two companies of the 1/9th Gurkhas and the two guns of the 23rd Mountain Battery, halted about two miles from the place, which could now be dimly distinguished through the haze and mirage away to the north-northwest. No news had been received from our cavalry, although gun and rifle fire had been heard for a short

time to the southward, and it now appeared as if Turkish cavalry and infantry were moving near the village. Not the least perplexing consequence of a mirage in Irak is the fact that it is quite impossible even for the natives of the country to distinguish either between men and animals, when seen through its distorting agency, or between troops of the various arms. Campbell, therefore, decided to be on the safe side and deployed for an attack, the 1/9th leading on a frontage of 350 yards followed by the two guns. Two companies of the 1/1st moved in echelon behind the left of the 1/9th, and the remainder of the 1/1st and the company of the Manchester Regiment marched behind in reserve at a distance of 1,000 yards.

No resistance was encountered, although some Arabs were seen to move away from the village as the troops closed on it, and, at 2-30 P.M. the 1/9th reached the place and captured about 150 of the inhabitants. The Gurkhas then passed through the village and gained the right bank of the Tigris, where they found themselves under heavy rifle fire which was promptly returned. Our guns subsequently came into action at a point about 1,600 yards from the river and to the south-east of the village. By 4 P.M. the two companies of the 1/1st Gurkhas had moved up and occupied a position to the west of the place, but later on it appeared as if the Turks were still in the loop of the river between the village and the fort. When the company of the Manchester's and one of the 1/1st from the reserve had advanced to attack them, it was discovered, however, that these enemy units were on the left, not on the right, bank of the Tigris. Eventually three companies of the 1/1st Gurkhas were placed as outposts to the west of the village, the bulk of the 1/9th were to the south of it and this battalion also established touch with the 93rd. After night had fallen the 19th Field Battery and one section of the 61st Howitzer Battery were sent across the river from the left bank, and these were entrenched, together with the guns of the

Mountain Battery, in a position from which enfilade fire could be brought to bear on the first two lines of the enemy's trenches at Hannah.

On the 19th General Aylmer had issued his final orders for the delivery of the attack. Under these the guns that were destined to enfilade the Turkish lines were to be placed in position on the right bank during the night. The troops of the 7th Division were to advance and establish themselves close to the Turkish trenches, a bombardment to cover their approach being carried out by the batteries on the left bank. This bombardment, so far as the limited quantity of ammunition would permit, was to be continued throughout the 20th and night of the 20-21st; but the infantry on the left bank were to remain in the positions that had previously been gained on the 20th, unless a favourable opportunity occurred of making more ground. The Cavalry Brigade was meanwhile to be placed by day in observation on the right of the 7th Division, and its guns were to co-operate in the bombardment.

These orders were amplified early on the 20th, when instructions were issued that, at 6-30 A.M. on the 21st (the sun would rise at 7 A.M.) or as soon as there was sufficient light to enable the targets to be distinguished, an intense and final bombardment of the enemy's first line would be made for two minutes from both banks of the Tigris. The artillery would then lift on to the second line, on which an intense fire would be directed for a further period of ten minutes. If the leading troops of the British were more than from 150 to 200 yards from the Turkish trenches at the commencement of the intense fire they must advance to this distance under cover of the bombardment, and the assault must be delivered as soon as the fire of the guns had been lifted on to the second line. The principal attack was to be made from the frontage held by the 35th Brigade, which was to be supported by the 9th Brigade, and it was of special importance to capture the

bastion situated about 500 yards from the Tigris, and also a small work near the bank of the river and in front of the general line of entrenchments. The general reserve would consist of the 28th Brigade, and this would be placed by 6 A.M. one mile in rear of the five inch howitzers of the 72nd and 77th Batteries, which were behind the British right centre. The Cavalry Brigade was by daybreak to have moved to a position on the extreme right of the army. The troops on the right bank were to assist those on the left by bringing enfilade fire to bear on the Turkish positions; but the two squadrons of the 33rd Cavalry and the two Horse Artillery guns were to advance to the bank of the Tigris and harass the enemy's retirement to the greatest possible extent. The transport was to be ready to march at the shortest notice, and in general all preparations were to be made for vigorous pursuit. The headquarters of the Corps would be in the river steamer *Medjidieh*.

There is little comment to be made in regard to the form of these orders, except that they transgress in some respects the salutary regulation that an operation order should tell the executive commander "nothing that he can or should arrange for himself....." If General Younghusband were competent to conduct the attack, he should surely have been competent to allot to the troops entrusted to him the tasks calculated in his opinion to further the success of the general plan of driving in the enemy's right. As it was he was relieved by Aylmer of this duty, and therefore, so far as the allotment of troops would affect the success or failure of the attack, was also relieved of a measure of the responsibility which should have fallen to him.

The prolonged telegraphic correspondence between the front and General Headquarters, a disagreeable phenomenon of modern war which seems to have been produced by improved means of communication, showed little slackening even on the eve of battle; for General Aylmer felt constrained to point out to the Commander-in-Chief and to General Townsend that he was far from

possessing full liberty of action as between the two banks of the Tigris. A large portion of the bridging material had been destroyed by bad weather, much of what remained was not reliable, and the Tigris Corps, was, he said, without the means of making good losses. As a result although infantry could be moved from one bank of the river to the other with moderate rapidity, it was a very different story as regards the transfer of cavalry and guns. Sir Fenton Aylmer then stated that, in his opinion, the enemy's object was now to prevent the British from passing through the defile between the Tigris and the Suwaikiyah marsh and over the Es Sinn entrenchments; for if the Turks when in such favourable positions for defence failed to check our troops, it was plainly most improbable that they would be able to resist the combined Tigris Corps and garrison of Kut-al-Amarah in the more open ground in the neighbourhood of this town. It was, continued General Aylmer, and apparently with reference to the movements that had recently been reported by General Townshend, of course possible that, for some reason, the enemy might not desire to offer serious resistance in the defile, and might resolve to fight a decisive action subsequent to the relief of Kut-al-Amarah. But, in any case, the dispositions of the troops after this place had been reached, and pending and even subsequent to the arrival of reinforcements, must be governed by circumstances. He added significantly that, "it may be assumed definitely that the 6th Division (holding Kut-al-Amarah) will not be the only weak one when we arrive—though the enemy will doubtless lose seriously."

By dawn on the 20th January, the troops of the 7th Division (19th, 21st and 35th Brigades) had gained and fortified a line some 600 or 700 yards from the Turkish trenches; but the use of the word division does not convey at all an accurate impression of the force that was available. The war establishment of the three infantry brigades of an Indian Division comprised at that time more than 9,000 fighting men. But there were now

fewer than 4,000 men in the trenches, after deducting those employed in various duties such as the care of transport, the camp guards, and the men suffering from temporary sickness. The Division, therefore, so called was in reality little stronger as regards infantry than one of its brigades should have been.

As a result of this lack of numbers Younghusband had been forced temporarily to break up the 21st Infantry Brigade, and to attach the battalions to the other brigades so as to provide something approaching a sufficiency of men with whom to deliver the attack. But the units then comprised in the 19th and 35th Brigades would necessarily lack the cohesion and potential momentum that would be possessed by four strong battalions in each brigade habituated to work in unison.

The left half of the British position was, as has been stated, held by the 35th Composite Infantry Brigade, and this was now composed of the 1/5th Buffs, the 37th Dogras and 97th Infantry, together with the Black Watch, the 6th Jats and the 41st Dogras. On the right was the 19th Composite Infantry Brigade, which besides its own battalions included the 9th Bhopals from the 21st Brigade and the 102nd Grenadiers from the 35th Brigade. Behind the left of the 19th Brigade and some 2,000 or 2,500 yards from the enemy's front line were the 72nd and 77th Howitzer Batteries, with the 61st (less one section) in rear of their left. The 20th, 28th and 1/1st Sussex Field Batteries were behind the 35th Brigade and were also about 2,500 yards from the Turks; and in rear of the centre of our line and perhaps 3,000 yards from the enemy were the two guns of the 104th Heavy Battery, making up a grand total of 30 guns. During the day the 9th Infantry Brigade also moved to a position on the bank of the Tigris not far from the artillery which was behind the 35th Brigade; and the headquarters of the 7th Division were in a watercourse on the bank of the Tigris behind the 9th Brigade.

In accordance with the orders which had been circulated by General Aylmer, Younghusband had, on the 19th, sent out

provisional instructions for the attack. Under these five bombardments of the enemy's positions were to be made on the 20th, each lasting for twenty minutes, and a period of one hour and forty minutes was to elapse between each bombardment. Intermittent firing was also to take place during the night of the 20-21st, but there were, in addition, to be two strong bombardments each of fifteen minutes duration. Early on the 21st an intensive bombardment would be made which would be heralded by a salvo from the eighteen pounders, and the subsequent timings of the programme for the artillery would be taken from this salvo. It appears, further, that the fire of the guns was both to be directed on various important localities, and was also to be employed in countering that of the Turkish artillery; and that in the whole action about 12,000 rounds were to be expended, a total which was not extravagant having regard to the task before the troops and their numerical weakness, but was probably as large as could in the circumstances be allowed.

Orders in greater detail were again issued from the headquarters of the 7th Division at about noon on the 20th. In these it was laid down that the assault of the infantry would commence on the 21st ten minutes after the artillery salvo, and the fire of the guns would then be directed for ten more minutes on the enemy's second line, and subsequently on the areas in rear of the the second line. The main attack was entrusted to the 35th Brigade, about 1,700 bayonets, and this would be made on the frontage from the bastion lying 500 yards from the river to the salient work standing near the bank of the Tigris, and inclusive of both localities. A matter of detail which should have been within the scope of the responsibility of the Brigadier was then mentioned, and directions were given that prior to the attack a detachment of the company of bombers was to be organised for the purpose of pushing along the trenches to the north of the bastion, and securing the flank of the brigade; and that a second

detachment, also of one company, was to be detailed to clear the captured line of trench and make prisoners of all men left in it by the enemy. The attack of the 19th Brigade, which was about 2,000 strong, would be subsidiary to that of the 35th, and the 19th must hold the enemy to their ground and be prepared to make a thrust home should a favourable opportunity occur. The 9th Infantry Brigade, which could muster about 2,000 bayonets, would support the attack of the 35th Brigade, and was, at 6 A.M. to be in position in certain trenches on the left bank, then occupied by the rearmost portions of the 35th Brigade, and lying about 1,200 yards upstream of the fort which stood on the right bank of the Tigris.

By the time that the first bombardment of ten minutes had ended, the assaulting infantry were to be within 150 yards of the enemy's front line of trench; and the advance to this distance was to have been made under cover of and during the various bombardments. The 128th Pioneers were to be at the headquarters of the Division by 6 A.M. on the 21st. One company of this battalion was to be prepared to fill in trenches as they were captured, and to make roadways over them for our guns and transport. Cooked rations for two days were to be carried on the men, and as many as possible in the second line transport; and all transport was to be ready to advance at the shortest notice. Prisoners were to be brought to divisional headquarters, and were to be handed over to the divisional cavalry, the 16th Cavalry.

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The total frontage that was actually held by the Turks was, as has been stated, about 1,300 yards, and under these orders the main attack was to be made on a frontage of about 500 yards by a force of some 3,700 bayonets, and a subsidiary attack was to be delivered by the 2,000 men that remained. Only one battalion was in reserve, but the Corps reserve, consisting of the 28th Infantry Brigade, about 1,300 fighting men, which was held in

hand for the purpose either of exploiting success or repairing failure, was on the left bank and was for practical purposes also the reserve of the Division.

It seems from the tenor of the orders given by General Younghusband that it was intended and hoped that the 35th and 9th Infantry Brigades should at once overrun the enemy's first and second lines, and that on their ability to do so would depend the success or failure of the attack. If this was the case it would perhaps have been better to have devoted to this operation a larger proportion of the troops that were available, leaving the four battalions properly belonging to the 19th Brigade, some 1,330 bayonets, to carry out the subsidiary movement; for if a very rapid success were gained against the Turkish right, time would not have been allowed for its reinforcement by such troops from the left as could not be held by the efforts of the 19th Infantry Brigade. Further, in a methodical attack of this kind success is generally either complete or failure absolute; since it is most difficult in any case to vary arrangements so as to meet new situations after the fighting has commenced, and with the inadequate means of communication that were at the disposal of the 7th Division, it was in all probability hardly practicable to do so.

The artillery bombardment, in which the warships joined, duly took place on the 20th, the land guns being supported by those in the Crane-fly and Dragonfly. The Turkish guns hardly attempted to reply to our shelling, but at first its effect was not apparent as regards any reduction in the volume of the rifle fire from the enemy's trenches, and whenever our troops endeavoured to gain ground they were met by a storm of bullets. Some advances were, however, made, and it was then ascertained the Turkish riflemen were holding a series of entrenchments in front of their main line. These therefore were bombarded, and as a result the enemy's activities diminished to an appreciable extent.

During a reconnaissance by air which was made on the morning of the 20th it was noticed that the Turks were still holding their positions at Hannah, where a gun pit or epaulment had been made behind the centre or right centre of their main line, and 2,000 men had been seen. The entrenchments at Es Sinn on the left bank had been elaborated, but owing to cloud no observation over the ground on the right bank had been possible. Later in the day General Townshend telegraphed that fully 3,000 infantry with guns were moving westwards along the left bank, that other troops were following these, and that a camp which had been observed at the Dujailah canal had disappeared. The receipt of this news caused General Aylmer not unreasonably to infer that, owing to the gun fire of the British, the withdrawal of at any rate a part of the enemy's army might be in progress. But it may be pointed out that the troops might also possibly have been either a division returning after relief at Hannah, or even a large working party that had been employed at the Es Sinn position on the left bank; or General Townshend might, as so often happened in Mesopotamia, have been misled in his estimate of the numbers of the enemy by the distorting effect of mirage. The British brigades, however, were, as a proper measure of precaution, told that steps must be taken so as to ensure that the fact of any retirement that might be made on the part of the Turk would at once be ascertained, and that the force must then be prepared immediately to follow the enemy. But warning was given of the presence of entrenchments which might be held by the Turks at Sannaiyat.

The reports that came in on the evening of the 20th from observers on the right bank of the river were to the effect that tents behind the enemy's line were being struck, and that movements westwards of transport were taking place. Formed bodies had been seen in motion behind the Turkish lines in the afternoon, and in the evening a column of transport which was proceeding eastwards was shelled and forced to turn back. An

aerial reconnaissance which was carried out in the afternoon disclosed little that was fresh in regard to the dispositions of the Turks. The weather throughout the day was cool and cloudy, but the surface of the ground was still so soft as to render movement of any kind a matter involving much exertion and considerable difficulty : and from this fact, coupled with the trend of the reports as to the nature of the reply that had been made by the Turks to the shelling, it now seemed as if they would accept battle.

By nightfall the greater part of the wire protecting the Turkish line had apparently been cut by our gun fire, and although the entrenchments were said then to be occupied by the enemy in strength, it is not impossible that this would have been a more propitious moment for the delivery of the attack than the morning of the 21st January. No change, however, was made in the programme. During the night of the 20-21st the bombardment from the left bank was, therefore, continued, and the troops on this bank of the Tigris made some ground. Those on the other bank meanwhile did their best to render assistance by means of gun and rifle fire, and also placed machine guns in positions from which effectively to enfilade the enemy's trenches on the 21st.

Early on the 21st January the British infantry on the left bank of the Tigris were disposed as follows: On the right of the 19th Infantry Brigade, which was now under Brigadier-General Norie, as Brigadier-General Harvey had been seriously wounded on the 20th, was one company of the Seaforth Highlanders entrenched at a distance of about 450 yards from the Turkish line. On their left were the 125th Rifles, and then came the 9th Bhopals and the 102nd Grenadiers, each finding their own supports. One company of the Seaforth was in echelon behind the right, and in second line were the remainder of the 28th and 92nd Punjabis. The system adopted, therefore, was in principle to dispose the

various forward units in depth, so that each might find its own supports and early mingling of battalions, with its resultant disadvantages, would be avoided.

The 35th Brigade, under Brigadier-General Rice, was drawn up on different principles. On the right and some 400 yards from the enemy's main line were the 41st Dogras, occupying a frontage of 250 yards, and about 100 yards in front of their left and holding the same frontage were the Black Watch; 130 yards behind the rear of the 41st were the 37th Dogras, and the 6th Jats were in support of the Black Watch; lastly 1,000 yards behind was the Brigade reserve, consisting of the 1/5th Buffs on the right and the 97th Deccan Infantry on the left.

The 9th Infantry Brigade, under Major-General Egerton, had left its bivouack at 3 A.M., and although much delayed by the fact that the Tigris, which was rising fast, had flooded one of the trenches or channels on the line of march, the troops had reached the positions two hours later. The rearmost units of the 35th Brigade did not clear these trenches until 6 A.M., and the 9th Brigade then deployed, on a frontage of 600 yards with the 62nd on the right and the 1/4th Hampshire extending the line to the river; behind the Hampshire were the Connaught Rangers, and behind these the 107th formed the Brigade reserve.

It appears that, in view of the weakness of the battalions of the 35th Brigade—the Black Watch could muster only some 300 rifles and the 6th Jats only 170—General Rice had issued orders that the battalions in support were to join those in front during the bombardment immediately preceding the assault. The Brigade reserve, which should have closed to within 300 yards of the supports prior to this bombardment, was also to continue the advance while the firing was in progress; and it was contemplated that the whole of the units of the Brigade would deliver the assault together. This arrangement was communicated to General Egerton, who then issued orders that the 62nd were to

move forward, when the shelling began, on a two company frontage into close support of the 35th Brigade, keeping about 350 yards from the Tigris. The 1/4th Hampshire were to advance in three lines in echelon behind the left of the 62nd, the leading companies being in line with the rear companies of the latter battalion; the Connaught Rangers were to occupy the trenches vacated by the 62nd, and the 107th were to remain in reserve.

General Rice joined his Brigade reserve at 6 A.M., and then ordered these battalions to push on, accompanying them for a distance of 500 yards to his advanced headquarters, which had been connected by telephone with the battalions in front. Owing to the wet soil and to casualties among the operators, it was found, however that the forward communications had now broken down, so that messages could only be sent to or received from the front by runner. The leading battalions, as so frequently happens in battle, were therefore necessarily left largely to their own resources.

Owing to morning mist the bombardment from land and river began only at 7-45 A.M. on the 21st, that is about three-quarters of an hour after sunrise, and under its cover the men of the Black Watch gained 200 yards in a couple of so-called rushes forward, although, owing to the clinging mud which was covering the surface of the ground, the pace was that of a slow amble rather than that of a race. The 41st conformed in this movement in spite of heavy and sustained musketry from the Turkish trenches. When the fire of the British guns lifted ten minutes later to the enemy's second line, the Black Watch drove their advance home followed by the 6th Jats and the 97th, and although the leading officer received a bayonet thrust as he reached the position, the bulk of the Turks had left it before our men could come to hand to hand fighting, and hurried in disorder to their second line. Consequently only one enemy officer, eight men and two machine guns fell into our hands. Not more than 50 of the Black Watch, however, gained the Turkish line, and these were

joined only by a few officers and men of the 6th Jats, so that, unless some effective impulse came from the remaining troops, the attack had already failed. Meanwhile the assault on the right of the 35th Brigade had met with even less success. All the British officers of the 41st were killed or wounded, the 37th were little better off, and owing to the storm of bullets that was directed from the enemy's lines only 25 men of the two Dogra battalions reached the wire entanglement, which had not been cut so effectively as where the Black Watch had made their attack. Fewer still forced their way through the wire but were soon obliged to fall back.

The attack made by the leading units of the 19th Brigade, which was delivered somewhat later, was quite unsuccessful, and such groups of men as went forward were either shot down or driven back by unceasing and violent musketry and machine gun fire that came from the Turkish lines. Although all the troops with the exception of two companies of the Seaforth were subsequently thrown into the fight, no progress was made.

The 9th Brigade was equally unfortunate. The mud prevented the men from moving faster than a slow walk, and in consequence the 62nd not only lost touch with the 35th Brigade, but owing perhaps to the fact that their line had been at right angles to the Tigris, swung too far to their right. Here they were exposed to a very strong fire, all the British officers were put out of action, and the advance came to a standstill. The majority of the 1/4th Hampshire in keeping touch with the 62nd were also brought to a full stop where the attack had failed, instead, as had been the intention, of supporting the troops that were successful; and the Connaught Rangers, who were put into the fight at 8 A.M., could find no cover as all the trenches were filled with dead and wounded, and themselves suffered heavily from the ceaseless musketry and machine gun fire of the Turks.

The little party of Black Watch and Jats had, on gaining the enemy's line, at once set about clearing their front by means

of bombing and rifle fire, and for this purpose they also turned one of the captured machine guns on the enemy. The Turks, however, were not long in recovering from their panic, and the small British force soon began to be hard pressed by fire from the front and also by bombers on both flanks. It was found to be impossible to open communication with the rest of our force, and the only reinforcements that arrived were half a dozen men of the 97th and one officer and 3 men of the 114th Hampshire. In the end, therefore, at about 9.0 A.M., a remnant consisting of 2 officers and 15 men, who had long ago exhausted their small stock of locally made and somewhat defective bombs, succeeded in escaping along the bank of the river to the positions from which they had started earlier in the day; and here they found that the remainder of the 35th Brigade were being assembled.

Owing to the complete breakdown of the means of communication on the left of his division, General Younghusband did not for some time realise what had occurred; but since, according to reports from the troops on the right bank, progress seemed to have been made by the 35th Brigade, while the right had, he knew, been checked, orders were at 9 A.M. sent to the field batteries to advance for a distance of 1,000 yards, and the headquarters of the division were moved to the point which earlier in the day had been occupied by the headquarters of the 9th Brigade. Half an hour later a report was sent to Aylmer to the effect that it was believed that the men of the 35th Brigade had gained the Turkish trenches and were making progress, but that the 19th Brigade had not been successful; and, at 10 A.M. orders were given that all the guns were to direct their fire on the Turkish right so as to assist the men of the 35th Brigade. Meanwhile General Aylmer had sent instructions for the 28th Infantry Brigade to advance closer to the front.

At this juncture it appeared, from movements that were observed by our troops on the right bank, as if a counter-attack might be made against the right of the 35th or the 19th Brigade.

General Aylmer consequently sent instructions for the 28th Brigade (less the 56th Rifles) to move forward to a position from which assistance could, if necessary, be lent to the 19th Brigade which could either meet the enemy's attack directly or take it in flank. At about the same time a message was forwarded to Younghusband that the attack was to be prosecuted with energy. But before either of these messages could come to hand, General Younghusband learnt of the failure of the 35th Brigade and of the retirement of the remnant from the enemy's position.

It seems that Younghusband now formed the opinion that the immediate renewal of the assault was out of the question, and that time must be given to the units for the purpose of reorganising and preparing for a fresh attempt. At about 11-30 A.M. therefore, orders were issued that a rapid bombardment of the Turkish line was again to be made at 12-50 P.M. and that this would be followed by a general attack which would be delivered at 1 P.M. and his decision was communicated both to Aylmer, who meanwhile had made a somewhat similar proposal, and to Keary on the right bank. At about the same time a request was also made that General Aylmer should give orders for the 28th Brigade to deliver an attack.

It is never easy to circulate orders during a battle, and as has been pointed out, the means of signal communication at the disposal of the Tigris Corps were not of the best. To add to these difficulties rain now began to fall heavily, and as a result communication except through orderlies practically ceased, and Younghusband's order consequently failed to reach many of the troops in time for effective action. Whether a further effort would, in any case, have been possible on the part of the 35th Brigade is doubtful, for only 600 of its men had been mustered and they had sustained a severe repulse; but as it was they were soaked to the skin, benumbed with cold and standing in trenches filled with water. The 9th Brigade was in better condition, but apparently the orders for the attack did not come to hand until

1-20 P.M. and when the units endeavoured to struggle onward through the holding mud, their attempt to do so was quickly crushed by the enemy's fire.

Even before the receipt of General Younghusband's order efforts on the part of the 19th Brigade to outflank the Turkish left had come to nothing, as it had been found to be impossible to move forward under the machine gun fire of the Turks over the perfectly flat plain which was rapidly being converted into a lake. Soon after noon orders had been issued by General Aylmer that two battalions of the 28th Brigade were to support the 19th Brigade. Of these the 51st Sikhs, who owing to the state of the ground were only able to drag themselves forward at a slow walk, came up some time after the end of the bombardment. They were in consequence unable to join in the attempt that had been made at 1 P.M. by the 19th Brigade to close with the enemy, and serious casualties were experienced even in gaining the trenches behind the left of the line which was being held by the battalions of the 19th Brigade. The 53rd Sikhs, after marching in line for a distance of 1,200 yards, succeeded in reaching, without much loss, a position behind the centre of the 19th Brigade; but here their advance was checked, and they were forced to remain under cover in trenches that were already deep in mud.

At about 1-30 P.M. Younghusband was therefore obliged to report to the headquarters of the Corps that no progress had been made, and Aylmer could only reply that the troops must hold on to their positions. This order was passed to the various brigadiers, who were at the same time directed not to commit their men to further attacks.

At 2 P.M. General Younghusband despatched another message warning General Aylmer that the infantry units under his command were all deeply involved in action, with the exception of the 107th Pioneers, and that the only others that had not been engaged were the 2nd Leicestershire and 56th Rifles of the 28th

Brigade. From this message it may be inferred that no great hope of victory was even then entertained at the headquarters of the 7th Division, but during the next hour Younghusband ascertained definitely that his men were far from being in a condition to renew the attack.

Meanwhile General Aylmer had sent the Brigadier-General of his General Staff to the 7th Division for the purpose of obtaining particulars of the situation from General Younghusband, and this officer arrived at the headquarters of the Division at about 3-30 P.M. In the course of the interview that followed Younghusband expressed the opinion that, owing to the heavy casualties which had been experienced, to the intermingling of the units, and to the physical condition of the troops, who were exhausted by the strain of battle and by the rain and cold, it was not advisable even to hold such ground as had been gained; he also stated that another attack should not be undertaken until the weather had improved. Some words that were spoken during the conference were apparently construed by General Younghusband as conveying the approval of Sir Fenton Aylmer for a withdrawal. Orders were issued, in consequence, by the staff of the 7th Division that, at nightfall, the guns were to move back to their original positions. At the same time the infantry were to retire to the entrenchments lying some 1,300 yards from the Turkish positions, the 19th Brigade holding the right half and the 9th Brigade the left half of the line. The 28th Brigade would form in rear of the 19th, and the 35th Brigade behind the 9th Brigade. These orders were first despatched by the Signal Service, but duplicates were then sent to the brigades by staff officers, who were authorised to explain to the brigadiers what was required.

General Aylmer, however, was very far from desiring or approving of any withdrawal, and, at 4-35 P.M., he sent out the following appeal to the troops: "For the honour of the Empire and for the sake of your brave comrades in Kut, I ask the

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gallant troops under my orders to hold on to their present position and to make one more supreme effort to capture the enemy's line." An hour later orders were circulated from the headquarters of the Tigris Corps that a further attempt to break through the Turkish lines must be made on the 22nd. The troops must hold and strengthen their positions in the interval. The 9th and 28th Infantry Brigades were both placed at the disposal of the commander of the 7th Division, who was to make the best dispositions that were possible for the renewal of the attack in the afternoon. Arrangements, it was added, were being made for the further bombardment of the Hannah lines by our artillery.

These two messages were duly handed by the staff of Sir George Younghusband to the Signal Service of the 7th Division for communication to the troops; but, at 7 P.M., Younghusband was obliged to report to Aylmer that the rain had severed all means of communication by signal and that it was doubtful whether the later orders had been received by the units in time to prevent the withdrawal. Plans for the 22nd must therefore be based on the supposition that the British had moved back to positions some 1,300 yards from the Turkish front.

As no further news had reached the headquarters of the Corps, meanwhile, General Aylmer sent a message at 8-35 P.M. to Younghusband, which was received half an hour later, to the effect that if the orders issued by the 7th Division had been carried out the troops must, for the night, remain in the positions to which they had withdrawn. If the orders had not been carried out the troops were to hold fast to the ground that had been gained. A report was forthwith to be made as to the action that had been taken. To this telegram Younghusband replied that to withdraw had seemed to be the only practicable course in view of the condition of the troops and the state of the weather. The brigades had, he said, been ordered to communicate with the headquarters of the division, and to reorganise in

positions that were as far forward as possible. He continued: "Am now in communication with 9th, 19th and 28th Brigades and hope shortly to relocate 35th Brigade.....Country is now a swamp and all movement exceedingly slow. Casualties not yet ascertained but believed to be heavy especially in officers, troops much scattered and mixed owing to repeated attacks. Collection and reorganisation at night and this weather correspondingly difficult. We are doing our best."

At about 10 P.M. General Younghusband sent one of his few remaining staff officers—the others were still on their rounds with his earlier orders—to ascertain the dispositions, strengths and condition of the battalions. Although the distances to be covered were not great this officer did not return until 3 A.M., when he reported the *moral* of the men was good, but the brigadiers were unanimous that a further offensive on the 22nd by the troops that had been closely engaged on the 21st was out of the question.

There was very little firing during the night for the torrential rain had put an end to the battle. Covered by the Seaforth, 53rd, 107th and Connaught Rangers, the British therefore were, able to withdraw and reorganise at leisure, and many wounded and much equipment were collected and brought in. It was, however a miserable experience, and when not on the move officers and men stood, sat or lay down in water, while rain or sleet driven on by an icy wind pelted down without ceasing. Yet by daylight the 7th Division had to some extent already been reorganised.

Early on the 22nd January the 19th composite Brigade had in front line from right to left the Seaforth, 28th and 92nd, and the 9th Bhopals and the 102nd were in support; the 28th Brigade, with which were the 128th Pioneers, was standing in rear of the 19th. Of the 9th Infantry Brigade, which was on the left of the 19th, the 107th and Connaught Rangers were in first line, then came the 1/4th Hampshire, and the 62nd were with the 28th Brigade behind the Hampshire. The 35th composite brigade,

however, was still being assembled behind the others. The fighting strength, in the line, of the four battalions of the 19th Infantry Brigade was only 13 British officers, 12 Indian officers, and 829 non-commissioned officers and men ; that of the units of the 21st Brigade was 9 British officers, 20 Indian officers and 627 non-commissioned officers and men. The 9th Infantry Brigade could muster only 32 British officers, 18 Indian officers and 1,037 non-commissioned officers and men, and the 28th Brigade less than 1,000 of all ranks. (Map 3.)

While these events had been taking place on the left bank, the troops on the opposite side of the Tigris had carried out their due part in the action. Soon after 9 A.M. on the 21st January a message was received from the headquarters of the Tigris Corps that an attack along the right bank might be made by a number of Arabs ; but our two squadrons only gained contact with a body of some 300. The Tigris, as has been stated, had for two or three days been rising steadily ; and at about 11 A.M. these squadrons of the 33rd Cavalry and the section of Horse Artillery which had been sent westwards to a position from which to harass the enemy's troops as they retired, found themselves in danger of being cut off by a wide stream which began to flow southwards from the river. They were obliged, therefore, to fall back. Soon after 1 P.M. the camp opposite to the Wadi was flooded and had to be moved a short distance away from the bridge. By evening the surface of the country was in such a state as to limit the rate of movement of a man on foot to one mile per hour ; and it was with great difficulty that the bulk of the troops were able to occupy a line across the bend of the river from the Arab village to the fort, while the two squadrons of the 33rd and one company of the Manchester Regiment undertook the security of the camp.

Early on the 22nd Younghusband made a personal report on the situation to General Aylmer, and, in consequence, the latter decided at 10 A.M. when the rainfall had fortunately ceased, to send a flag of truce to the enemy, and to ask for a cessation

of hostilities for the purpose of collecting the wounded and burying the dead, as the casualties of the British had amounted to about 2,700. Although the Turks did not officially agree to this truce until some time afterwards, the flag had no sooner been hoisted in our lines than a number of Arabs swarmed out of the enemy's positions, and began both to rob the disabled and dead and to collect rifles. Officers and men therefore advanced unarmed from our trenches to protect their comrades, but were themselves in more than one instance assaulted and robbed by the Arabs. Before the armistice had been arranged the Turks, it appears, also removed those of the disabled who had fallen close to their trenches; but although many British units were not informed until late in the day that a suspension of arms was in progress, the remainder of the wounded were duly collected and brought into the British lines.

While this work was in progress instructions had been circulated by General Aylmer to meet the immediate situation. The ground that was held by the British was now to be divided into three areas: a forward or A. area on the left bank, in which there would be a force of three infantry brigades, and in addition all the guns except those on the right bank and those of the Horse Artillery; B. area, a rest camp on the left bank of the Tigris above the Wadi, where tents would be pitched for the troops and the whole of the second line transport would be placed; and C. area below the mouth of the Wadi which was to be occupied by all troops on the right bank, except those holding the position that lay opposite to area A. Areas A. and B. would be garrisoned alternately for periods of 72 hours, first by the 19th, 21st and 35th Infantry Brigades, and the 107th Pioneers, the whole being under the commander of the 7th Division; these units would be relieved by the 8th, 9th and 28th Infantry Brigades (the first of which was to comprise the 1st Battalion Manchester Regiment, the 1st Battalion Highland Light Infantry which had now arrived at the front by steamer, and two companies of the 2nd Rajput

Light Infantry), and the 128th Pioneers. The troops on the right bank would be under the commander of the 7th Infantry Brigade; the Provisional Battalion, composed of drafts for units in Kut-al-Amarah, would secure the left bank of the Tigris in the area below the Wadi; and all the steamers and mahailas (barges) that were employed in bringing supplies to the troops on the left bank were to close up to B. area, while those serving the units on the right bank were to lie off C. area.

General Aylmer had already telegraphed a summary of the situation and a description of the weather, at 1-10 A.M. on the 22nd January, both to General Headquarters and to Townshend, and had ended the telegram with the sentence:* "I am forced to abandon my intention *re* attacking enemy's position to-morrow, as troops in front line have been withdrawn without my orders to vicinity of entrenched position occupied by them two days ago, about 1,300 yards from enemy's trenches. They are greatly disorganised owing to unsuccessful attempt to storm enemy's position, making it utterly impossible to send them back again at present."

When the redistribution of the force was being arranged Aylmer again telegraphed, at 10-20 A.M. on the 22nd, both to Basrah and to Kut-al-Amarah the depressing news of the result of the battle in the following terms:* "I regret that there is no doubt that in attempting to assault the enemy's position yesterday we have suffered a severe reverse in spite of the greatest gallantry of troops, and our losses have been very heavy. The troops on retiring removed as many wounded as possible but many must still remain near the enemy's trenches. I am sending a request to the Turks for six hours armistice to bury dead and bring away wounded. For the present I shall hold the line about 1,200 yards in front of the enemy's position and a reserve line behind. The troop's condition may be regarded as prohibiting further advance

* These telegrams are quoted in my Campaign in Mesopotamia, Major-General Sir C. Townshend.

for the present. My proposals will fellow on receipt of further information of extent of reverse. Weather is atrocious and floods increasing."

The ordeal of battle throws a breaking strain on every nerve and faculty, and this is the reason why errors must be expected in carrying out even the most straightforward manœuvre. It was also probably for this reason that Napoleon declared that a commander should not accept battle unless he considered the odds to be 7 to 2 in his favour, or in other words that a wide margin must be allowed for such mistakes and faults of commission and omission as would inevitably occur during the contest.

The odds certainly were by no means 7 to 2 in favour of the Tigris Corps on the 21st January. The enemy, as it turned out, had made good use of the delay in the advance of the British caused by the gales and rain, and were very well protected; the trenches in the front line being from 6 to 7 feet deep, and in addition there were loopholed parapets and well built parados. Deep communication trenches, with many traverses, also connected the front with the second line. Against such cover the comparatively feeble bombardments that could be delivered by the British were unlikely to prove effective, and as a result the troops may be said to have attempted with equal numbers (the British apparently were opposed by the combined 35th and 38th Divisions, two battalions of the 51st Division, and the whole of the 52nd Division, totalling probably 9,000 infantry with 26 guns) to evict an almost unshaken and resolute enemy from a most formidable position. This was a task hardly within human power; and it is, therefore, not probable that a decisive success would have been gained had the weather been less inclement, and the state of the ground such as to enable rapid movement to be made; and had such minor errors of execution as the loss of direction on the part of the 9th Infantry Brigade been avoided.

If the odds were indeed so little in favour of the troops under General Aylmer, the question must inevitably arise as to whether

the battle should have been fought. There are, of course, occasions on which battle must be offered or accepted whatever the chances of success, and a commander who hesitated to engage until his prospects of success were as favourable as those mentioned by Napoleon might never find himself in a position to make the great venture. This, however, was in actual fact not an occasion when it was vital to risk everything in the hope that some weak point might unexpectedly be found in the enemy's situation. And had Sir John Nixon been aware of what is now patent in regard to the quality of the Turkish troops, the formidable nature of the enemy's position, and the powers of resistance that were still possessed by the garrison of Kut-al-Amarah*, it may safely be conjectured that he would not have urged his subordinate to deliver an immediate attack. But Sir John did not possess this knowledge, and as is usual in war, was obliged therefore to base vital decisions on inaccurate premises. It has been pointed out that he was also in bad health, and actually he was invalided on the 18th January and replaced by Lieutenant-General Sir Percy Lake, the Chief of the General Staff in India.

* The place surrendered only on the 29th April.

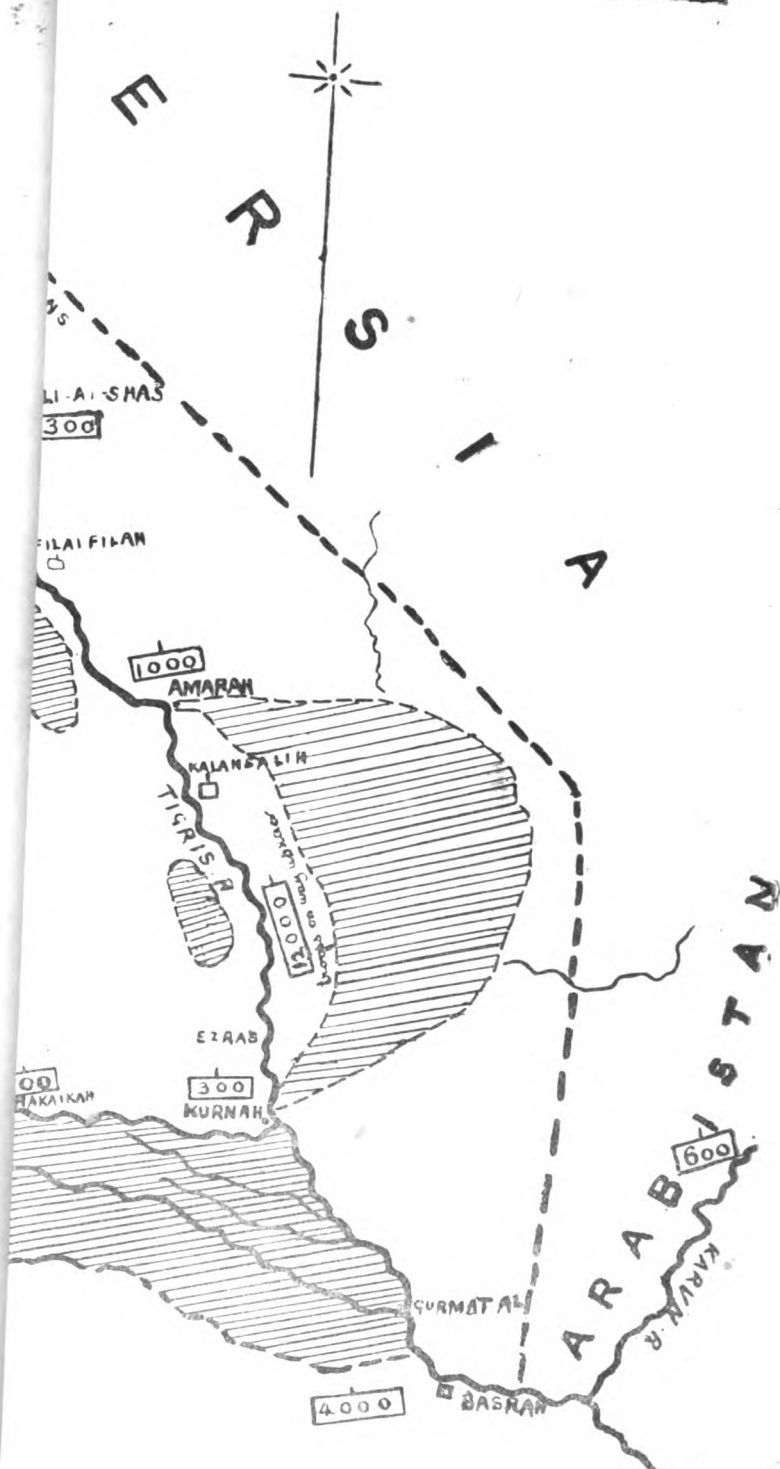
MAP 4.

3 Miles



HAMADAN is some 200 miles
distant from Baghdad

Map 2



APPENDIX

Distribution of the British force in Mesopotamia, end of January, 1916.

Kut-al-Amarah: (About 8,500 fighting men).

Headquarters of the 6th Division, Major-General C. V. F. Townshend.

16th Infantry Brigade—

2nd Dorsetshire Regiment.

66th Punjabis.

104th, Wellesley's, Rifles.

117th Royal Mahrattas.

17th Infantry Brigade—

1st Oxfordshire and Buckinghamshire Light Infantry.

22nd Punjabis.

103rd Mahratta Light Infantry.

119th Infantry, The Multan Regiment.

18th Infantry Brigade—

2nd Norfolk Regiment.

7th Duke of Connaught's Own, Rajputs.

110th Mahratta Light Infantry.

120th Rajputana Infantry.

30th Infantry Brigade—

Det: 2nd, Queen's Own, Royal West Kent Regiment.

Det: 1/4th Hampshire Regiment.

2/7th Gurkha Rifles.

24th Punjabis.

67th Punjabis (less detachment).

76th Punjabis.

One squadron 23rd Cavalry.

One squadron 7th Lancers.

One squadron 33rd Cavalry.

10th Field Artillery Brigade (eighteen 18-pounders).

63rd, 76th, 82nd Batteries; Ammunition Column.

1/5th Hampshire Howitzer Battery Territorials (four 15-pounders).

86th Heavy Battery (four 5 inch guns).

Two 4 inch guns 104th Heavy Battery.

Four 15-pounders Indian Artillery Volunteers.

Machine-gun Battery.

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48th Pioneers.
 17th and 22nd Sappers and Miners.
 Bridging Train.
 Searchlight Section.
 Signal units.
 Supply and Transport units.
 Field Ambulances and Hospital Units.
 On the Tigris four 4·7 inch guns in barges.

At the Tigris front :

Headquarters of the Tigris Corps, Lieut.-General Sir F. J. Aylmer.
 Headquarters of the 3rd Division, Major-General H. D'U. Keary.
 7th Infantry Brigade, Lieut.-Colonel L. W. Y. Campbell—
 Two companies 1st Manchester Regiment.
 1/1st, King George's Own, Gurkha Rifles.
 1,9th Gurkha Rifles.
 93rd Burma Infantry.
 9th Infantry Brigade, Major-General R. G. Egerton—
 1st Connaught Rangers.
 1, 4th Hampshire Regiment (Territorials) less one company.
 62nd Punjabis.
 107th Pioneers.
 2nd, Queen Victoria's Own, Rajput Light Infantry (at Wadi), less
 two companies.
 Signal Units.
 Headquarters of 7th Division, Major-General Sir G. J. Younghusband.
 19th Infantry Brigade, Brig.-General A. B. Harvey—
 1st Seaforth Highlanders (Ross-shire Buffs, the Duke of Albany's)
 28th Punjabis.
 92nd Punjabis.
 125th Napier's Rifles.
 21st Infantry Brigade, Brig.-General C. E. de M. Norie—
 2nd The Black Watch (Royal Highlanders).
 6th Jat Light Infantry.
 9th Bhopal Infantry.
 41st Dogras.
 35th Infantry Brigade, Brig.-General G. H. B. Rice—
 1/5th Buffs (Territorials).
 37th Dogras.
 97th Deccan Infantry.
 102nd, King Edward's Own, Grenadiers.
 128th Pioneers.

One squadron 16th Cavalry.

Signal units.

Corps Troops.

28th Infantry Brigade, Major-General G. V. Kemball —

2nd Leicestershire Regiment.

51st Sikhs.

53rd Sikhs.

56th Punjabi Rifles.

6th Cavalry Brigade, Brig -General H. L. Roberts—

14th King's Hussars.

4th Cavalry.

7th Haryana, Lancers (less det : in Kut).

17th Cavalry (less one squad : and two troops) acted as divisional cavalry to 7th Division.

33rd, Queen Victoria's Own, Light Cavalry (less dets: in Kut and at Nasiriyah).

S. Battery Horse Artillery (four 13-pounders).

Signal and Administrative units.

9th Field Artillery Brigade (eighteen 18-pounders).

19th, 20th, 28th Batteries, Ammunition Column.

61st Howitzer Battery (six 4-5 inch howitzers).

72nd and 77th Heavy Howitzer Batteries (each four 5 inch hows.).

One section 104th Heavy Battery (4 inch guns).

23rd Mountain Battery (10-pounders) less one section.

1/1st Sussex Field Battery, Territorials (four 15-pounders).

3rd and 13th Companies Sappers and Miners.

Provisional Battn. of drafts for units in Kut-al-Amarah.

Signal, Supply and Ambulance units.

Two Flights, 30th Squadron, Royal Flying Corps.

On the way up river---

Two companies Manchester Regiment.

1st Highland Light Infantry.

1/6th Devonshire Regiment (Territorials).

26th Punjabis.

27th Punjabis.

24th Sikh Pioneers.

47th Sikhs.

59th Scinde Rifles.

82nd Punjabis.

89th Punjabis.

1/3rd Sussex Field Battery, Territorials (four 51-pounders).

*The Battle of Hannah.**Ali-al-Ghaybi :*

Two companies 67th Punjabis.

One troop, 16th Cavalry .

One 15-pounder gun Indian Artillery Volunteers.

Filai Filah : One Company 20th, Duke of Cambridge's Own Infy. (Brown-low's Punjabis).

Amarah : 3rd Brahmans.

One company 4th, Prince Albert Victor's, Rajputs.

One troop 16th Cavalry.

Two 15-pounder guns Indian Artillery Volunteers.

Signal, Supply and Medical units.

Depôt 30th Squadron Royal Flying Corps.

Kalahsalih, Ezra's Tomb and various bridges.

Two companies 20th Punjabis.

Kurnah : Two companies 43rd Erinpura Regiment.

Hakaihah, Suk-Ash-Shuyukh :

31st Punjabis, 12th Sappers and Miners (less one section).

Nasiriyah, Butyaniyah :

12th Infantry Brigade—

1/5th Queen's Royal Regiment (West Surrey), Territorials.

44th Merwara Infantry.

90th Punjabis.

34th Infantry Brigade—

Two companies, Queens' Own, Royal West Kent Regiment
112th Infantry.

114th Mahrattas.

30th Mountain Battery.

1/2nd Sussex Field Battery, Territorials.

Four 15-pounder guns Indian Artillery Volunteers.

12th Cavalry (less two squadrons).

One squadron 33rd Cavalry.

Signal, Medical, Supply units.

Basrah :

General Headquarters.

Headquarters of Inspector-General of Communications.

Two'squadrons 12th Cavalry.

4th Rajputs (less one company).

One section 23rd Mountain Battery.

4th Sappers and Miners.

Supply units.

Hospital units.

Base Depôts

One Flight 30th Squadron Royal Flying Corps.

One Flight Royal Naval Air Service.

Under orders to move to the Tigris Front.

4th Field Artillery Brigade.

13th Field Artillery Brigade.

60th Field Howitzer Battery.

Karun : Area 23rd Cavalry.

Two companies 43rd Erinpura Regiment.

Naval : Vessels at Tigris front—

**Dragonfly }
Crane-fly } each carrying one 4 inch gun, and machine guns.
Butterfly }**

Minesweepers, etc.

Shipping : Available—

At this period there were available for all military purposes in Mesopotamia some 17 paddle steamers, 3 small sternwheelers, 8 or 9 tugs, 10 or 11 launches, and 36 barges.

Of these there were with General Aylmer 8 steamers, 3 tugs and 21 barges. Only a proportion of the accommodation in the remainder could be used for the transportation of troops up the Tigris, as part of the space in the vessels and barges was taken up by stores and supplies required for the maintenance of the Tigris Corps. A number of Mahailas (native barges) were also hired for the carriage of stores and supplies, but their progress was very slow.

A SIDESHOW IN THE DAYS OF WATERLOO.

By "*Al Khanzir.*"

In the year 1824 the East India Company's papers in connection with the Nepal war of 1814—16 were published in a ponderous folio volume of over a thousand pages, to enable—as we read on the title page—the Court of proprietors of East India Stock “to judge of the propriety of entertaining the question of further remuneration to the late Governor-General”—the Marquis of Hastings. He, poor man, needed all the help he could get; though he had done more perhaps than any other Governor-General to establish our Empire in India, he was yet to die penniless and under something of a cloud.

It is well worth reading, that old book; as you turn its worm-eaten pages, pictures of a forgotten India will rise before your eyes. But if we are to see these pictures in their true perspective we must first look to their setting; the scenes of the Nepal war lose much of their colour unless they fall into their proper place in the panorama as a whole.

When Lord Moira, afterwards Marquis of Hastings, landed in India in autumn 1813, the country was in a condition of unstable equilibrium. The settlement at the close of the first Maratha war could not be permanent; the Peshwa and the Bhonsla merely awaited their opportunity while they sullenly licked their wounds; and, though Holkar and Sindhia were more reconciled to their position which was indeed one of complete independence, their territories were a festering sore in the body politic, whence the poison might spread at any moment to the British sphere of influence. For these princes administered their dominions by foray and **chaut* in the good old Maratha way. Sindhia kept some 40 thousand so-called regulars, divided in five corps to each of which he allotted a district

* Forced levy.

for its maintenance in lieu of pay ; while Holkar whose regular army had partially dispersed was still nominal over-lord of Amir Khan's Pathans to the number of thirty thousand well-trained men of all arms. Between them they were bleeding Rajputana white. But over the above their pseudo-regular establishments they extended their patronage to swarms of Pindari horse who each autumn about the Dassera sallied forth from their fastnesses on the Nerbuda to rob and ravish all and sundry from the Nizami northward through seven degrees of latitude to Hindustan. In 1814 it was reckoned that Chitu and Dost Mohammad, the notorious Pindari leaders, could muster forty thousand mounted followers who owned allegiance to no man but themselves. Such, then, was the state of internal India.

Across the Sutlej, Ranjit Singh then in his thirty-fourth year, had consolidated his position in the Punjab and welded the Sikhs into a nation. The Lion of the Punjab was too wise a man to measure his strength with the British. But he too watched and waited ; for he longed to seize the Sikh states on our side of the Sutlej, though he feared our power.

And in the hills to the north along our borders for seven hundred miles from the Tista to the Sutlej lay the Gurkha kingdom of Nepal. The rise of this kingdom had been meteoric. Nepal proper is a thickly populated and fertile sub-alpine valley on the upper waters of the Bhagmatti river, bounded on the North by the high passes leading to Tibet. It was during the eighteenth century that the petty princelets of the valley were conquered by Raja Prithwi Narayan, chief of the Gurkhas, a hill-tribe living in the district of that name to the North-West of Nepal. And in these early days we find the Gurkhas displaying in a marked degree that amazing streak of savagery which is still apt to mar a very chivalrous character. For their own chronicles relate with grue-exactitude that, on the fall of the town of Kirtipur after a particularly stout resistance, Prithwi Narayan demanded the nose of every male survivor of the garrison to a total weight of eighty pound of flesh.

After the death of Prithwi Narayan his policy survived; the Gurkhas proceeded to extend their conquest to the four points of the compass. Westward, one by one they ate up the petty hill-rajahs of Kumaon and Garhwal till they had reached the Sutlej. There they found their way barred by Ranjit Singh. Northward they carried fire and sword into the barren uplands of Tibet, and actually sacked Shigatse and disturbed the Tashi Lama himself at his devotions. For which impious act the Chinese in 1792 sent an army of seventy thousand men over the passes into the heart of Nepal, and extorted an ignominious submission within thirty miles of Khatmandu, a truly astonishing performance. Nepal has been the nominal vassal of China ever since*. Eastward they dispoiled the raja of Sikkim of his lands west of the Tista. And southward they spread to the Terai, that rich belt of sal forest and swampy grass jungle anything up to twenty miles in width that extends below the hills for five hundred miles from the Tista to the Ganges. The hill-man always looks to the plains for wealth; and the Terai was a land of rice crops, and rich pasture, and timber. "Every sal tree is a gold-mine" was a Gurkha saying; already the Terai was yielding them ten of their total revenue of twenty lacs, and the British seemed supine—why not take more? So from 1804 to 1810 they encroached on our borders, without let or hindrance other than an occasional protest to which they returned a soft, but evasive, answer.

But at last the worm turned. In the Gorakhpur Terai there occurred a particularly flagrant encroachment; Minto—then near the end of his tour of office—demanded an investigation by commissioners appointed by both parties; and the commission's finding was decisively in favour of the British. The commissioners then proceeded to investigate further cases of encroachment to the eastward in the Saran Terai of Behar; but the Nepalese representatives

* The official Gurkha chronicles take a different view:—

"Mantrinayak Damodar Pandé cut the Chinese army to pieces and obtained great glory. Afterwards the Chinese Emperor thought it better to live in friendship with the Gurkhalis."

See Wright's "History of Nepal," p. 261. An early instance of conflicting communications.

avoided the issue by departing to Khatmandu before the proceedings had well begun. And the Nepal Government steadfastly refused to carry out the previous findings of the commission in regard to Gorakhpur. We had got no forrarder.

This, then, was the position which faced Lord Moira on his arrival. There can be little doubt that the Gurkhas had decided on war. As early as the summer of 1813, Nepal had sent an appeal to China for help; had largely increased her army; and had sought to propitiate the gods by human sacrifice. And in March 1814, a Council of State attended by all the leading Gurkha Generals was held at Khatmandu. The warning given at this Council by Amar Singh Thapa, the conqueror of Garhwal and Kumaon, should be borne in mind by all bellicose non-combatants; he addressed the young raja as follows:—"We have hitherto but hunted deer; if we engage in this war, we must be prepared to hunt tigers.....The advocate of war, he who proposes to fight and conquer the English (alluding to Bhim Sen Thapa, the regent) has been bred up at court, and is a stranger to the toil and hardships of a military life. Even now that he proposes war his place is about your person.. ...Our life has been passed in traversing forests with hatchets in our hands. War we know to be an arduous undertaking." There spoke the soldier, and a very gallant soldier, too, as we shall see. But the court party carried the day for war.

Lord Moira soon realised that further argument was futile. After due notification, the disputed districts in the Gorakhpur Terai were occupied by our troops on April 22nd, 1814. The Gurkhas retired before them without resistance. But the unhealthy season, which in the Terai lasts throughout the summer and autumn, was close at hand; so the troops were withdrawn soon after and civil police installed in their place. This was the Gurkhas' opportunity. On May 29th their regular troops swept down and reoccupied the district, killing about forty of our police—some of them in peculiarly cold blood*. War was now inevitable unless the Nepal

* "Our troops.....at the edge of the sword administered the portion of mortality to about forty of their numbers." Thus Amar Singh Thapa in a subsequent letter to Sir David Ochterlony.

Government would disown and punish its agents. Lord Moira gave it every opportunity to do so, and an almost interminable correspondence ensued which lasted till the campaign opened in November but Nepal had not the slightest intention of complying with any of our demands.

Lord Moira decided on war with the utmost reluctance. The state of India behind him was far from inspiring confidence as we have seen. And the treasury was empty. This latter misfortune was due to a variety of causes, prominent among which was the perennial question of exchange. As the result of the Napoleonic wars, the sicca rupee had soared far above its nominal sterling value; and public creditors demanded cash in India to purchase private bills at the enhanced rate of two shillings and ten pence in preference to receiving their dividends by bills on England at the fixed rate of half-a-crown. Further, the recent six per cent loan had been raised with the greatest difficulty, and had been quoted in the market at 16 per cent below par. Money was altogether very tight; so much so that leading Calcutta houses were paying as much as 12 per cent for advances on Government securities. It was in fact, an even more difficult problem than that which now confronts India's Finance Member when he is asked to find the money, say, for Waziristan.

The solution which was adopted was not particularly creditable. The native State of Oudh, shorn of much of its former territory, enjoyed at this time a subsidiary alliance with the Company. The nature of its government will be understood when we remark that literally the only officials in the State were its tax-collectors; neither civil nor criminal law was administered. The Nawab Vizier of Oudh, Ghazi-ud-Din Haider, who had just succeeded his father, was at best a particularly timid and weak-witted young man; but, placed as he then found himself with a strong party in the State against him, he was pathetically eager to do all in his power to strengthen his position with the British resident at his court and with the Governor-General. The resident appears to

have been thoroughly unscrupulous in all his dealings, and it is satisfactory to know that he was afterwards removed in disgrace. However, at the time he traded on his position to induce the Nawab to make two separate subscriptions, each of a crore, to the 6 $\frac{1}{2}$ % per cent loan at par. Thus were the expenses of the war provided. It is true that the Nawab's lamented father, who was a first class miser, was reputed to have left behind him a hoard amounting to fourteen crores; so the son's subscription to the war-loan was not excessive—the more so as he had suffered from the Gurkhas quite as much as we had. Still it is perhaps fortunate for the fair fame of our Finance Members that they are spared similar temptations in these hard times.

During the summer of 1814—while campaigning was impossible—warlike preparations proceeded apace. Intelligence was of course the first consideration; practically nothing was known about the country in which the campaign was to take place, and the Intelligence Department—which was then under the Quarter-master-General—was of the most amateur description. It is not surprising, therefore, that we find the Governor-General in correspondence with all and sundry who had information to offer. Secret-service agents of all descriptions—horse-dealers, fakirs, mahants, traders,—flit across the pages with voluminous and for the most part highly coloured reports. For instance, we find letters from Mr. William Moorcroft, Superintendent of the Company's Stud, who was in touch with a Kashmiri trading house in Patna which traded in otter-skins with Nepal, Lhasa, China proper, and Selink (*sic*). The head of this firm had promised to point out the mouth of the secret road through the forest said to lead up the valley of the Baghmatti to Khatmandu. And, in addition, Moorcroft suggests that an agent of the firm should be sent *viâ* Lhasa with the gift of an ear-trumpet for the Hakim of Kashgar, whose wife, it appears, was deaf; by which means we might learn whether the Chinese were mobilising in Tibet and Turkistan to help Nepal. But the value of any information we might so obtain was highly doubtful; for, as Moorcroft concludes somewhat sadly, "the Cashmeereons are deceitful.....and are convenient agents in all kinds of chicane."

Indeed, it is evident that China's probable attitude in regard to the Nepal War exercised Lord Moira's mind not a little. For we find that, as early as June 1814, he was in correspondence on the subject with the Honourable Company's Supercargoes in Macao. The reply was reassuring. The Supercargoes wrote that "the officers of the Canton Government will be unwilling to enter into any discussion on a subject that does not immediately interest or concern themselves, as no idea of benefit to their country would induce any of them, at least such as we have met, to engage in a question that might ultimately involve them in some responsibility..... If there are Chinese officers resident in Nepal, it is not improbable that their representations may have a tendency to allay, rather than to excite, the apprehensions of the Pekin Government. Your Lordship is probably aware of the latitude taken in detailing the exploits of the Chinese armies....." Very nicely put. So no ill effects from the war were to be feared—at least in Canton. In fact, the direct contrary was the case; for the position of the Supercargoes was a difficult one. At best, their only means of resisting oppressive measures was to refuse to unload their ships. But now an additional complication had arisen. The American War was in progress; the "Arabella" of Calcutta had been recaptured from an American privateer by His Majesty's Ship "Doris" off Macao; and the American merchantmen in port dared not sail. So far so good; but the Supercargoes must clearly have allowed themselves to be over-reached by the Yankee interest ashore; for the Viceroy of Canton had ordered the immediate departure of His Majesty's ships—with what success is not stated—and had forbidden the English merchantmen in port either to revictual or to make clearances to countrycraft. In their quandary the Supercargoes saw their best hope of fair treatment in vigorous action against Nepal, which might result in convincing the Chinese Government that the Company was not to be trifled with.

By 1814 the days of the European adventurer in India were already numbered. After the First Maratha War had broken out in 1803, Sindhia had dispensed with all the British officers serving

in his army; and at the close of the war the terms of peace had included a clause to preclude the further employment of Europeans, or Americans, with the Maratha armies. The half-castes Jean Baptiste Filoze and Jacob still commanded the wreck of Sindhia's French-trained troops; but the foreign element had for the most part followed Perron into retirement, while officers of British extraction—such as the Skinners—had either entered our service or were out of employment.

But echoes of the days of the Free Lances were still to be heard in the Nepal Wars. Most notable of the ex-partisans were Major Gardner and Captain Hearsey, who were given a body of irregular troops by Lord Moira for the conquest of Kumaon. As Mr. H. G. Keene has told us in his charming book "*Hindustan under the Free Lances*," Gardner—the original of Thackeray's Major Gahagan—had resigned his commission in the British army in 1797 to take service under Tukaji Holkar. However, during the Maratha War in 1804, his master, who was little better than a drunken reprobate though an excellent guerilla leader, grossly insulted him in open darbar, whereupon Gardner did his best to cut him down and then escaped on his horse before the onlookers had recovered from their astonishment. Gardner then joined Lake, who gave him a commission in the Jaipur service; and, in 1814, we find him in command of the irregular regiment of police which afterwards became the 2nd Bengal Lancers, Gardner's Horse. Captain Hearsey had been one of the European officers under George Thomas, ex-seaman and deserter, who hacked out a kingdom for himself in Haryana. Gallant old George Thomas, "*Sahib Bahadur*," his uncompromising loyalty had been his undoing; for he would have none of Sindhia and his Frenchmen, and they were too much for him in the end. Hearsey of course was an old campaigner, and we find him warning the Governor-General that officers must be prepared to travel light in the Nepal hills; the modest field service scale which he suggests for a captain is five servants, with two mules, two jack-asses and two hillmen for his baggage.

We hear another echo in a letter from one E. Butterfield, who in support of his request for employment writes, "I served Scindiah from the age of 16, under Generals de Boigne and Perrong (*sic*).....when important and enterprising duties were required. I was often selected out of my tour to carry them into effect." It is pleasant to know that Butterfield found employment in Gardner's irregular corps.

But there were a few adventurers of the old sort still in harness. Among the numerous hill-rajahs who had been dispossessed by the Gurkhas and whose help we wished to gain, was Sansar Chand, Raja of Kataoch, who had lost his land on the left bank of the Sutlej. And we read that his "considerable body of infantry" was commanded by one O'Brien, a deserter from the 8th Light Dragoons, who "in his new situation professes to be very zealous to serve his country." Unfortunately ex-private O'Brien was given little opportunity to co-operate with his British allies during the campaign; his master held aloof, professing to fear an attack on his rear by Ranjit Singh and the Sikhs, but more probably he had grave doubts about our beating the Gurkhas.

Nor was O'Brien the only deserter who could find an opening for his talents in those days. For John Shipp tells us in his memoirs that the Gurkha army itself had been largely trained by two worthies named Browne and Bell, deserters from the Company's Foot and Artillery respectively: the latter of whom had been made a colonel of artillery. Both of these men were discharged from the Nepal service on the outbreak of war.

To pass now to the campaign itself; from the point of view of the student of military history the Nepal war is of peculiar interest. In it the India Army for the first time found itself engaged in mountain warfare as we know it to-day. We might naturally expect, therefore, that the lessons it had to learn would be many and painful. But if—along with the novelty of the conditions—we also consider the characteristics of our commanders and the low level of efficiency to which the army of the period had been allowed to sink, we shall

cease to feel surprise at the welter of bloodshed through which our forces waded to final success. With very few exceptions, age and inefficiency seem to have been the sole qualifications of our generals—even Sir David Ochterlony himself, the hero of the war, was nearly sixty; while at its outbreak the Indian Army was passing through one of these recurring periods of retrenchment when the one consideration is economy, regardless alike of our commitments and of the political situation.

Not content with being supreme in the realms of policy, Lord Moira appears to have been wholly responsible for the strategy of the campaign. And a better example of dispersion of force would be far to seek. His plan of campaign involved the invasion of Nepal by four separate armies, which—from East to West—were to assemble as follows. On the right the principal force, 8,000 men with 26 guns under Major-General Marley, was to concentrate at Dinapore by November 1st for a direct advance on Khatmandu by the Makwanpur valley between the Baghmatti and the Rapti rivers. Every effort had been made to render this force efficient in every particular. On its left, the Benares Division, 5,000 men with 15 guns and 900 irregulars under Major-General J. S. Wood, was to concentrate at Gorakhpur by November 15th. The rôle of this division was to evict the Gurkhas from the disputed territory in the Gorakhpur Terai, and then to invade the Palpa district of Nepal. Further to the West again, the 2nd Division, 3,500 men and 14 guns under Major-General Gillespie, was to concentrate at Saharanpur by November 1st; its rôle was to force the passes of the Dun, seize the crossings of the Jumna and the Ganges and subsequently to occupy the province of Kumaon. On the extreme left, the 3rd Division, 6,000 men with 16 guns and 4,500 irregulars under Major-General Ochterlony, was to concentrate at Rupa by November 1st, and was then to operate against the Gurkhas' westernmost provinces, and to reinstate the dispossessed rajas of the Simla hills. With the exception of Ochterlony's 3rd Division of which the infantry was entirely native, each of the above

divisions contained one British battalion and a proportion of European artillery. In addition Gillespie had with him a dismounted squadron of the 8th Light Dragoons.

To oppose to these forces the Nepal Government had some twelve to sixteen thousand regular troops, and an indefinite number of ill-armed levies of doubtful loyalty. Their artillery was rudimentary, a four-pounder being their heaviest piece; for long-range fire they relied chiefly on the jingal, a glorified musket which threw a four-ounce ball with considerable accuracy. Their strength lay in the difficulties of their country, and the gallantry of their Gurkha troops.

Let us now follow the fortunes of each of these forces in turn, commencing with the Dinapore Division on the right. It will be remembered that Minto's Frontier Commission, having settled the question of the disputed districts in the Gorakhpur Terai, afterwards broke up in the Behar Terai without reaching a decision. Colonel Bradshaw, the British representative, then occupied the Behar Terai up to the frontier with a small force of six companies of native infantry and Gardner's irregular horse. The Gurkhas left him in undisputed possession throughout the summer of 1814.

As we have seen, Marley's advance with the main force should have commenced on November 1st. But there was much unaccountable delay; and Bradshaw, who was meanwhile acting as a screen, decided to strike a blow on his own initiative. On the night of November 24th he successfully surprised the Gurkha frontier-post of Barharwa, completely destroying its garrison of 400 men. The local effect of this successful opening was enormous. The Gurkha forces on this front were completely demoralised; by a prompt offensive the Makwanpur valley might have been occupied almost without resistance and the road opened to Khatmandu. But it was not to be.

General Marley continued his leisurely advance to the frontier, which he reached on December 11th with nearly his whole force. And there he decided to remain inactive, wasting the precious days,

until his battering train arrived.⁵² Meanwhile at the villages of Parsha and Sammandpur—twenty-five miles out to his front and forty miles apart—he left two detached posts each of about five hundred men. These posts had been originally established by Bradshaw, but subsequently no steps were taken to support them or to strengthen them in any way.

As the days passed by, the Gurkhas recovered their moral; and in the early hours of January 1st the inevitable happened. Both posts were attacked in overwhelming force. At Parsha the garrison fought in a circle in the open till their ammunition ran out, Matheson of the artillery fighting his gun till every man had been hit and the last round fired. Less than fifty stragglers escaped. At Sammandpur the sepoys did not behave well and that the loss was somewhat less was due solely to the attractions of the supply depôt which the Gurkhas stopped to loot and burn.

Marley was paralysed by the news. At a time when the situation could be restored only by a vigorous counter-stroke, he decided to fall back on his battering train which had reached Bettia about twenty miles to his rear. By January 11th his whole force had retired. The effect was lamentable. His native troops now became thoroughly demoralised in their turn, and desertion was rampant; the whole of the Terai of Saran and Tirhut was lost; the Gurkhas raided at will; and the villagers sent vast supplies of rice over to the enemy. To make matters worse, Marley was ready to believe any report about the enemy's strength; and, as the Governor-General sadly recorded, "in the correspondence relating to these transactions..... the numbers of the enemy were made far to exceed any amount that the population of the country, on the largest scale of computation, could supply."

Large reinforcements were hurried up, including two battalions of British Foot, in an endeavour to re-establish confidence. The force now numbered some 13,000 men; and at last, egged on by the Governor-General, Marley consented to advance again to the frontier. There he finally broke down. On February 10th Marley rode out of camp and left his army without even handing over his command.

The subsequent history of the Dinapore Division can be best summed up in the Governor-General's own words: "My regret in this disappointment was deeply aggravated by the utter and more signal abortiveness of the sanguine hopes which I entertained of the success of the Division under the command of Major-General George Wood his (Marley's) successor in command." In March the division, designed by Moira to be his striking force withdrew into cantonments having accomplished absolutely nothing.

We now come to the Benares Division under Major-General J. S. Wood, not to be confused with George Wood, Marley's successor. This division should have advanced from Gorakhpur on November 15th; but here again there was unconscionable delay, and it was thanks only to our old friend Ghazi-ud-din Haidar, the Nawab Vizier,—who supplied elephants and other transport—that the force finally started.

After occupying the Gorakhpur Terai without any fighting, Wood prepared to force the passes into Palpa. On January 2nd the attack-orders for the following day had been actually issued when, at the eleventh hour, a Brahman—"Kauckunnuddee Sewaree" by name—came to Wood with an alternative plan. The Brahman urged that a fort called Jhitgarh must be attacked as a preliminary to any advance. Now Brahmans are plausible folk as a rule, and Kauchunnuddee Sewaree was no exception; to quote Wood himself "he placed the success of this affair beyond doubt.....and he answered for its success and offered to assist in its execution with such confidence and enthusiasm that I resolved to begin by attacking Jhitgarh next morning." Without any reconnaissance, mark you.

Two columns moved to the attack; Major Comyn with seven companies to turn the left; Wood himself with twenty-one companies to attack the front. The Brahman had promised Wood to lead him to an open plain in front of the fort; instead of which his column, moving through thick jungle, suddenly found itself within fifty yards of the walls and "under a very heavy and galling fire." But

in spite of the complete surprise the 17th Foot charged most gallantly, and they were stoutly supported by the native infantry. Comyn's column, too, was approaching; the fort was all but won.

Then Wood's nerve failed him. He saw the hill behind full of enemy, so he "determined to stop the fruitless loss of life by sounding the retreat." And what of friend K. Sewaree, you will ask. Wood shall answer you. "Having pointed out the fort to me within fifty yards of it, he suddenly disappeared, and I am still ignorant of his fate. If he is with the enemy I can have no doubt of his treachery." Nor can I.

Wood then marched and counter-marched along the foot of the hills, everywhere "judging it inadvisable to attempt" the passes. Finally the news that the enemy were ravaging the Company's territory and actually threatening Gorakhpur itself decided him "to relinquish all offensive movements, and to limit his views to the protection of our territory." By the beginning of May Wood had 1,200 men in hospital. He then went into cantonments at Gorakhpur. He too had accomplished absolutely nothing.

On the left of the Benares Division, the 2nd Division from Meerut had concentrated at Saharanpur. The Begum of Surdhana had been asked to provide four battalions to look after Meerut in the Division's absence; and we read that "Her Highness complied in the handsomest manner." It is interesting to recall that this good lady, who was to die in the odour of sanctity some twenty years later, had started her career as helpmeet to the declining years of Walter Reinhardt, *alias* Le Sombre, the double-dyed ruffian who had cheerfully murdered the English at Patna in 1760 after Kasim Ali's native retainers had refused to act as butchers.

Under the vigorous leading of gallant old Rollo Gillespie the Meerut Division was well ahead of its scheduled programme, and it forced the passes into the Dun in the latter half of October. The first serious obstacle which Gillespie encountered was the fort of Kalanga, a quadrangular stone work garrisoned by about six hundred men, on a flat-topped hill a mile or two from the present

town of Dehra Dun. On October 29th Gillespie made his dispositions to take the fort by assault. The attacking force was formed into four columns, which were to attack the four forces of the fort simultaneously under cover of a bombardment. To co-ordinate the attacks, a signal was to be fired by the battery two hours before the hour for the assault.

During the night of October 29th the columns moved into position and the guns were brought into action. But Gillespie was an impatient old gentleman. When morning dawned he ordered the signal to be fired much earlier than he had given the columns to expect, and three out of the four failed to hear it.

The fourth column attacked alone under a withering fire. The Gurkha commander, anticipating Boche machine gun tactics of a century latter, had concealed a gun outside the work to enfilade the base of the wall, so the head of the column was swept away as the scaling ladders were being erected, and the assault failed with heavy loss.

Gillespie then rushed up three more companies of the 53rd Foot and the dismounted squadron of the 8th Light Dragoons from his reserve, and led them forward in person. But the 53rd hung back; they were in a sullen discontented mood from over-much drill, and in any case the walls were unscaleable. So Gillespie went on with the Dragoons—he had commanded the 8th and they loved him. He was shot through the heart within thirty yards of the fort gate.

Our loss on this day was twenty officers and two hundred and fifty men, the squadron of the 8th losing over half its numbers.

The division then fell back to Dehra Dun there to await the battering train from Delhi. The results of so severe a reverse in this, the first, engagement of the campaign were naturally deplorable, and seriously prejudiced the operations of all the other divisions.

On its arrival on November 24th, the battering train was placed in action to breach the wall, and by 1 P.M. on November 27th the breach was declared practicable. The storming party, consisting of the grenadier companies of all battalions with two

additional companies of the 53rd, then advanced to the assault with muskets unloaded. But the Gurkhas defended the breach with astounding gallantry, and the few stormers who reached the top hesitated to leap to certain death on the spears that awaited them below. Luxford of the Horse Artillery ran forward a howitzer and a twelve-pounder in close support actually to the bottom of the breach where he fell mortally wounded. But his heroism was wasted, and finally the stormers withdrew from the breach. For two hours more they remained huddled in the open under the enemy's fire—unwilling to retire but sullenly refusing to advance again to the assault. This second failure cost us 11 officers, and 483 men of whom about half were British.

Now Kalanga was simply an open work, and afforded no shelter from shell-fire whatever. After the second failure a systematic bombardment was opened, and in two days the garrison had been reduced to eighty and was obliged to evacuate the fort. But the damage had been done; the prolongation of the war was directly due to the extraordinarily stout defence which the defenders had put up, and the incredible lack of all generalship on the part of the besiegers.

After the fall of Kalanga Major-General Martindell arrived to succeed Gillespie, and the division moved north-westward into the Himalayan foot-hills. Only those who know the Himalayas can realise the difficulties which faced the division in its campaign against a brave and enterprising enemy in the Simla hills. The stupendous ranges tower one above another in endless succession from the plain, their precipitous flanks draped in a tangled growth of cactus, shisham, and thorn. And the country was then entirely unmapped and entirely roadless. But, worst of all, Martindell was not the man for the job.

The Gurkhas, under the command of Ranjor Singh, one of their best generals, had fallen back before him to a strong system of stockades on a commanding ridge called Jaitak. Martindell prepared to attack Jaitak on December 27th. And a book might be written on the mistakes of those twenty-four hours alone.

During the night of December 26th, two separate columns under Majors Ludlow and Richards moved off on either side of Jaitak ridge. The columns were to reach their positions of deployment before dawn, and to attack simultaneously.

But the guns of Ludlow's column were late at the starting-point and failed to keep up on the March. And the head of his column did not reach its jumping-off place till long after daylight. The grenadier company of the 53rd Foot had been leading, and from the hill where they were halted the men saw a stockade below them and seemingly at their mercy. The temptation was too great; the men insisted on rushing the stockade before the straggling column in rear had closed up. Ranjor Singh was ready for them. The Gurkhas counter-attacked in force with their kukris, and the 53rd were driven back in disorder on the native infantry. The latter broke at once, and the column fell back on camp with heavy loss.

Meanwhile Richards had completed his fifteen mile approach-march with the loss of his reserve ammunition which had parted company in the darkness. After daylight he worked forward to a precipitous peak within a short distance of the main stockade—a key-point in the enemy position. There he was attacked in force; and—as there were no signs of Ludlow who had already fallen back to camp—he was obliged to sit down and hold on.

As soon as he heard of Ludlow's reverse Martindell panicked; frantic messages were sent to recall Richards. But all touch had been lost with his column, so none of the orders reached him till near night-fall. Richards, meanwhile, had been putting up a stout fight against repeated attacks, confidently expecting that his reserve ammunition would arrive and that Martindell would support him. At last the ammunition with him ran out, and his men were reduced to rolling down rocks on their attackers. Then, at dark, came Martindell's orders to retire.

There were fifteen miles to be covered in the dark over break-neck country. That a single man of the column lived to see camp

was due solely to the devotion of Lieutenant Thackeray and the Light Company of the 26th Native Infantry; by dint of repeated bayonet charges they kept the enemy at bay. Finally Thackeray and his ensign were both killed and the remnants of the company captured; but the column was saved. The losses of the day amounted to about five hundred men.

The rest of the story of the 2nd Division is quickly told. Martindell at once informed the Governor-General that he was "not warranted to adopt further offensive measures till reinforced;" and a period of complete inactivity followed which lasted three months. Then, reinforcements having been provided with the greatest difficulty, Martindell with "prodigious labour" got his battering train into position for the bombardment of Jaitak. The bombardment opened most successfully; but, after six days, Martindell ordered it to cease because he "feared that the bombardment would bring down the garrison on his position"—he out-numbered the enemy by about three to one. At the close of the first campaign on May 15th Jaitak still held out, and its garrison marched out with the honours of war. Now listen to Lord Moira's apologia: "The selection of Major-General Martindell was founded on..... the hope that the occurrences attending his command in* Rewa in the year 1813 would have stimulated him to exert himself in regaining the ground he had lost in the public estimation on that occasion, and, more than all, the difficulty of finding any other unemployed officer of rank sufficient to exercise so large a command." In other words, Martindell's qualifications were incompetence and age.

Up to this point the story of the Nepal War has been dismal enough reading; but fortunately for our position in India Lord Moira had found one leader amongst his generals. The leader was the sexagenarian Ochterlony, commander of the 3rd Division.

Old "Loni Atta" as the sepoy called him had probably the hardest task of any of the four commanders; for he had to operate in the difficult hill-country on the left bank of the Sutlej, while opposed to him was our, and his, old friend Amar Singh Thapa at the head

* The operations which followed the Pindari irruption into Mirzapur in 1812.

of three thousand picked Gurkha troops. And the enemy fought magnificently, the individual Gurkha rapidly establishing moral superiority over the sepoy.* But, though Ochterlony's weapon repeatedly bent in his hand and his British officers often sacrificed themselves in vain, he yet plodded on relentlessly to final victory.

As to the manner of campaign which Ochterlony waged, let him speak for himself; after the news of Gillespie's death at Kalanga he wrote as follows: "I feel myself necessitated to consider them as exceedingly formidable (Gurkha stockades).....It would seem that the character and operations of the war should be changed, and instead of being composed of small detachments with light artillery, our forces should be concentrated on certain points... .. no one should move without a gun or guns sufficient to throw open these barriers rendered more formidable by the determined character of their defenders." As he wrote so did he act; Ochterlony planned deliberately and executed boldly. His method was simple; he carefully reconnoitred the limited objectives which he wished to seize preparatory to a general attack; he then occupied these positions and consolidated them immediately—the latter an entirely novel proceeding in Indian warfare; and afterwards he insisted on bringing up his guns no matter how stupendous the labour involved. But, above all, he kept pegging away incessantly—"straitening" the enemy, he called it: in spite of all his wriggings, Amar Singh was never out of the net.

Amar Singh was a very gallant soldier, but as the meshes close round him we hear a note of despair; on March 2nd we find him writing as follows in an intercepted despatch to the Maharaja of Nepal: "The pundits have pronounced the month of Buisak as particularly auspicious for the Gurkhas, and by selecting a fortunate day we shall surely conquer. I am desirous of engaging the enemy slowly and with caution, but cannot manage it, the English always being in a desperate hurry to fight."

* The sepoy of those days had a profound aversion to facing the kukri with the bayonet. See "Sketches of the Gurkha War," by an eye-witness, published, 1822.

The curtain rang up on the closing scene of the drama on April 15th. Amar Singh had fallen back on his last stronghold, his stockaded fortress on Malaon ridge; and Ochterlony delivered a general attack. The Gurkhas, fortunately, busied themselves in repelling several of the minor attacks; and by night-fall on the 15th Colonel Thompson with the main column was established on the ridge within a few hundred yards of the principal stockade. But the position was still critical; for the sepoys were jumpy—earlier in the day a rush by fifteen Gurkha swordsmen had stampeded a battalion. Thompson dug in for dear life; before his troops were put to the test he had managed to stockade his whole position leaving only a gap for his two guns.

The Gurkhas saw that unless they could evict Thompson the game was up. That night Bakhtiar Thapa—Amar Singh's bravest lieutenant—came to him to hand over his infant son to his safe-keeping and to say farewell. And at dawn on the 16th Bakhtiar attacked with two thousand picked troops. Three times they rushed on the gap in Thompson's stockade, and three times the attack was swept away by grape-shot from the guns. The gunners were almost all knocked out; only an officer and a man were left to work one gun while some pioneers worked the other. But the stockade held, and at last the Gurkhas withdrew in sullen defeat. Ochterlony seized his chance to counter-attack and this time the sepoy proved the better man—the Gurkhas broke. Bakhtiar's body was picked up outside the stockade and was sent to Amar Singh wrapped in a shawl: next day his two wives burnt themselves on his funeral-pyre in sight of the whole army.

Amar Singh was now cooped up in his last stockade, and the siege proceeded systematically. At length, on May 15th, when his garrison had been reduced to two hundred men by hunger and desertion*, he capitulated on terms. He was allowed to march out with his arms and private property; but the Gurkhas agreed to

* From these deserters, and from prisoners taken in this campaign, were formed the three original Gurkha regiments, now the 1st King George's Own, the 2nd King Edward's Own, and the 3rd Queen Alexandra's, Gurkha Rifles.

evacuate all their territory from the Sutlej to the Kali river, an area nearly corresponding to our present districts of Simla, Garhwal and Kumaon. In this capitulation was included the fort of Jaitak which still defied Martindell and the 2nd Division.

One more front remains to be described. When it had appeared that Martindell was held up indefinitely by Ranjor Singh at Jaitak, Lord Moira had commissioned Gradner to raise an irregular force for the invasion of Kumaon which was only lightly held. The campaign commenced on February 15th, and was conducted by Gardner with consummate skill. It ended in storming of Almora on April 25th and the capitulation of the enemy. Kumaon was promptly annexed. And incidentally most of the existing Nepalese custom-duties were continued. On the list of dutiable exports two unusual items catch the eye :—

“Slaves, male and female, each—Rs. 2-8-0.”

“Elephants, caught in pits—Rs. 2 ($\frac{1}{4}$ estimated value).”

The slave-traffic was stopped as “obviously improper” but elephants at eight rupees sound strangely cheap—even for the good old days.

It is hardly too much to say that the fate of India had depended on the issue of Ochterlony's operations. The reverses to the other divisions had stirred the smouldering embers of opposition everywhere; Ranjit Singh was mobilising his Sikhs in the Manja; Amir Khan had advanced to Agra whence with insolence undisguised he offered us the help of his Pathans; and Sindhia and the Marathas were stirring ominously. Had the conflagration started, there was hardly a soldier left in Hindustan to quench it; who can say to what lengths it might not have spread?

During the summer of 1815 the peace negotiations dragged on with interminable delays. By the terms imposed by Lord Moira, Nepal lost the Terai and the territories which she had annexed from Sikkim in addition to the country evacuated by Amar Singh. At last, on December 2nd, the treaty was signed. But time passed and still the Raja of Nepal failed to ratify it. In the end it became obvious that the Gurkhas meant to renew the war.

The story of the second campaign can be briefly told. In January 1816 Ochterlony was given an army of nearly 17,000 men, and was ordered to advance on Khatmandu by the short and direct line which had proved too much for Marley in the previous campaign. Here, in contrast were the vicious strategy of the first campaign, we have an example of concentration against the true objection—not indeed against the enemy's capital, but against the enemy's field army which would inevitably interpose to bar the way. Ochterlony's operations were a complete success. By a daring night-march over an unknown and very difficult pass he turned the enemy position on the first range of hills; and on February 28th he signally defeated the Gurkhas at Makwanpur, only some twenty miles from Khatmandu. The author of the "Sketches," to whom reference has previously been made, attributes the good behaviour of the native infantry there engaged to the fact that the men had recently returned from overseas; for, he quaintly remarks, "it has been observed that these expeditions diminished the force of their superstitious prejudices, and rendered the seapoys more manly, careless, profligate, in a word, more like European soldiers."

The battle of Makwanpur ended the war, on March 3rd the treaty was presented to Ochterlony duly ratified with the Red Seal.

The treaty has never been broken. During the Mutiny Nepal did us yeoman service, in recognition of which the Terai was handed back to her. And in the Great War she found the men for forty regular Gurkha battalions, besides placing two brigades of State troops at our disposal. Nepal, the only independent Hindu State in the world, is Great Britain's ally.

But the hill-man still looks to the plains. And the spirit of Prithwi Narayan still lives. If we were to leave India?—well, the Ganges then would make a very proper frontier for Nepal, to start with anyhow. No doubt they have considered the problem fully; in fact, I should not be at all surprised if they could tell you exactly how many nationalistic noses go to make eighty pounds.

THE CONDUCT OF TACTICAL EXERCISES WITHOUT TROOPS

(A LECTURE GIVEN TO THE OFFICERS OF THE 6TH INDIAN
INFANTRY BRIGADE.)

By Major E. J. Ross, M.C., Brigade-Major.

There are three kinds of tactical exercise with which we normally have to deal:—

- (a) Tactical exercises with troops.
- (b) War games.
- (c) Tactical exercise without troops.

Tactical exercises with troops are of course in some ways the most practical; up to a point they simulate actual war conditions most closely. On the other hand, the instruction which any but the most junior officers receive is often very limited; for the officer has to concentrate more on the training of his men than on the tactical situations which may arise. Moreover, the resemblance to war conditions becomes very slight so soon as troops get into close contact.

War games, if well run, are very interesting. They are, however, of little value for teaching the handling of small formations. Further, since it is impossible to keep all officers fully employed, much time is wasted. Nor can these exercises be carried out on the actual ground.

Taken all round, exercises without troops provide the best means of training officers in tactics, co-operation between the various arms, study and use of ground, and the art of leadership in the field generally.

It is on the method of conducting such exercises that I propose to lecture to-day.

I must admit to approaching the subject with some diffidence. It is a very difficult one to lecture on ; for so much depends on the personality of the conducting officer, so much on his natural powers of description, so much on his faculty of clear and lucid expression. These traits must be to some extent natural and in born ; but at the same time they can be improved beyond all measure by study and practice.

Tactical exercises without troops are in some ways rather like whisky. If they are good, they are very good, very interesting, very stimulating. But if they are bad, they are very bad indeed and you get from them nothing except perhaps a sick headache.

On the other hand they differ from whisky in one very important attribute—they don't improve by keeping. Pre-war whisky is generally the best of its kind. Pre-war tactical exercises are apt to be out of date, especially if they have lain at the bottom of the adjutant's cupboard for the last fifteen years, to be resurrected hurriedly the day before they are to be carried out.

If your scheme is to be good, it must be good all through—good in the way it is thought out and prepared beforehand, and good in the way it is actually carried out in the field.

I will begin by trying to give you some points about the original production of your scheme.

As in every other form of instruction you must begin by getting a really clear and fixed idea of the main lesson you are going to teach. Obviously, you can't teach the whole art of war on one lesson. So think out the principle you are going to teach. Is it to be the conduct of an infantry attack?—the combination of all arms in an advanced guard?—or the mutual support of infantry, artillery and machine guns in a retirement? Select your lesson, and set your scheme to bring out that lesson.

All this seems very elementary. But it is often neglected. I have known it neglected even here in Kohat. Only the other day

The conduct of tactical exercises without troops.

a unit in its training programme gave, for one day's exercise, "Piqueting, Mountain Warfare." The special idea which it sent in, however, had for its *motif* the attack and capture of a particular pass held by the tribes.

Now, up to a certain point, that is alright. For if you are going out in the hills to attack a pass, you must protect your march with piquets. But here according to the training programme, you are studying the question of piquets, and are therefore, thinking piquets. While, according to the special idea, your object is to defeat the enemy and to drive him out of a particular pass—on which object you must concentrate every man, every rifle and gun, you can possibly spare, cutting down protective troops to the lowest minimum of safety. But it does not end there. You must concentrate all your thoughts, all your energy, and all your driving power, on taking that pass: every atom of them which you expend elsewhere—as on piquetting—is so much loss at the decisive point. From the exercise I quote, you are, therefore, learning to transgress a first principle of war—the maintenance of the objective.

If you are going to teach piquetting, make your scheme one in which piqueting is the most important part: the protection of a convoy or something of the kind. And then let your officers devote their brains and energy to piquetting. Have I made that point clear?

I don't think you need be afraid that, if you stick to one Main Lesson, others will not crop up. In a piqueting scheme, for instance, there will be lots of opportunities for co-operation between guns and infantry, and infantry and aeroplanes, and so on. You will get your one main lesson; but if your scheme is on any thing like practical lines you will get scores of minor lessons besides.

When you have decided on your main lesson the next step is to design a situation which will bring it out. The first requisite for this is imagination. Now imagination is, I suppose,

one of the greatest—if not the greatest—attribute of a really good leader. It is imagination which enables a commander to see what will happen if he follows a particular line of action, and to forecast what the enemy will do. It was Lee's imagination, for instance, which revealed to him what a paralysing effect Jackson's advance up the Shenandoah Valley would have on Maclellan's campaign in the Yorktown Peninsula; and it was Wellington's imagination which designed the crossing of the Douro. So cultivate your imagination; it can be improved, like every other faculty, by practice.

But you must remember to keep your imagination within bounds. It can be a very dangerous gift if it is allowed to run off practical lines. You will find the following a good rule to go by: Work your imagination to its uttermost in regard to the non-existent factors of your scheme; dispositions of troops, the effect of enemy fire, and the realism of the situation in general. If you have knowledge and experience, the more you work your imagination in these respects the closer will you approach to reality. But don't turn your imagination loose on actualities. For instance your scheme is a bad one if it depends for its effect on imagining that the Peshawar road is an unfordable river, that hill 2,096 is a valley, or that the cavalry parade-ground is a lotus-covered lake with sunburnt girls in orange bathing-dresses basking on its shores. That sort of imagination will ruin any scheme.

Remember, too, that the Indian officer or soldier is so constituted as to be incapable of imagining anything—except perhaps the price of atta. If you tell an I. O. that the Peshawar road is an unfordable river, he will say, "of course it is, if Your Honour says so;" but two minutes later he will lead his men through the middle of it. That is one of the reasons why we still rule, or at least occupy, India.

Having arrived at a rough idea of what your scheme is going to be, you must next consider the force to be employed. Well

use your imagination again. Put yourself in the position of a commander ordering the particular operation, and detail exactly the troops you would employ were you in his place. Put in that strength only—no more. Don't go putting in odd arms merely to show that you have thought of them. In every scheme there seems to be an unfortunate platoon of sappers—quite irrespectively of whether it can possibly be wanted or not. Give that platoon a rest when you can.

Then again you must make your strength conform to the rank of the officers you are going to instruct. Don't use an army corps for the instruction of your subalterns. You will find it a good guide to give an officer a force which the rank next above him might have to handle in war.

When you have thought out your lesson and the size of your force, the next point is to select your ground. If time is limited and you can only go out once, it is much the best plan to work out the whole of your scheme from the map beforehand and afterwards to go through it all on the ground. You can then make any minor alterations required in accordance with what the ground actually looks like when you get there. But however well you know a bit of country, it is never safe to omit to go through your scheme actually on the ground. Your memory has a funny way of letting you down. And so have maps, particularly our local maps, when you get down to tactical detail. You get unexpected bits—like the hills to the East of the Kohat Pass which look alright on the map, and from below, but which, in fact, troops cannot get over; so all your scheme goes awry.

So far you have considered the lesson you want to teach, the size of the force, the ground and the situation. To put some life into the proceedings you have now to hark back and to invent a series of events leading up to them. That is to say, you have now to produce your general, and special, ideas.

One often meets a lot of confused notions as to what general, and special, ideas are. Well, they are simply the means by which an officer is informed of the nature and details of the problem which he is called upon to solve. Don't get mixed up as to what goes into the general idea, and what into the special. The rule is this. The general idea gives information which in war would be known to both sides; that is to say, such essentials as the general state and organisation of the opposing armies, the frontiers, the political situation and so forth—to the extent necessary for the purposes of the scheme. In the sort of exercise with which we are dealing here—a brigade or regimental exercise--the general idea should be very brief indeed. Here is an example of a general idea:—

NORTHLAND and SOUTHLAND, two small but highly civilised states, whose common frontier follows the ranges crossing the Kohat Pass, are at war. After some fighting a NORTHLAND brigade has occupied the important SOUTHLAND frontier-town of KOHAT. A SOUTHLAND force is known to be concentrating South of DHODA.

This gives you all the general information you require. It tells you that you are going to deal with civilised warfare between small forces, and gives you some notion of what it is all about.

The special idea, on the other hand, conveys essential information known only to your side; that is to say, such things as your commander's intentions, his general plan, and the strength he will employ. In fact, it makes you acquainted with the details of the problem to be solved. Here is an example of a special idea:—

A strong SOUTHLAND mixed brigade arrived at DHODA on the evening of 3rd June. The G. O. C. has received orders to recapture KOHAT with a view to its use as a base for future offensive

operations. He decides to march before dawn on the 4th by the main KOHAT road. Starting point, the DAK BUNGALOW at 0,400.

The following troops are detailed as advanced guard, etc.:

You will note that this special idea consists practically of a digest of your immediate superior's orders. Well, that is what it always is. And here it is worthy of remark that every problem of war with which you will have to deal—at least until you rise to be a military dictator—will always form part of a larger problem. Therefore, no scheme will be complete unless you give an outline of what the fellow above wants done. You want not only to encourage your officers to use their own initiative in solving a problem, but also to train them to tackle it on lines which will help, not hinder, their superior's plan.

It should be noted that the general, and special, ideas do not as a rule require study on the ground. They are, in fact, digests of the orders, etc., which you would have received in war long before you had reached the ground where your action was to be fought, and which would have been studied on the map. Therefore, without detracting from the realism of your scheme, you can issue these overnight. And you would do well to get officers who are taking part in the scheme to do some written work on them the day before; *e.g.*, they can appreciate the situation, or write orders, overnight. Not only is this good practice for them, but it also saves time next day; for every one is *au fait* with the situation when you reach the ground, so you don't have to sit about in the burning sun while people study the general, and special, ideas.

Now we get to the actual work on the ground. And that is where the difficulty, and the greatest need for careful preparation arise.

Personally, I think the best way is to carry on the show by the issue of short narratives for reference describing each

situation as it arises, while the instructor amplifies these in his own words as vividly as he can, and has certain questions prepared and ready which he proposes to ask on each of them in turn.

These narratives are very difficult to prepare really well. They must contain all the information which the recipient would get in war but nothing more. They must be concise and clear, but at the same time they must give as vivid a picture as possible of the actual situation. And, above all things, the situations described must be those which are likely to occur in war.

The questions to be asked on each situation should be arranged logically and in proper sequence. That is to say, you begin with an appreciation, follow it with a plan, then with orders for carrying out that plan; and finally you can pursue the various units through their action in accordance with the orders they receive.

The instructor should always have notes on the answer to each question asked by him. These notes should contain various important points to be thought of and the principles to be borne in mind. This is particularly important when a scheme is in contemplation where there are several syndicates each with its instructor.

Perhaps the best way of dealing with a situation is to detail one officer to act as the commanding officer of the superior formation. This officer should issue his orders to the rest of the syndicate as though they were his subordinate commanders. Afterwards, each of the others in turn gives his orders for his own minor formation, addressing the whole syndicate as though they were his subordinates. In this way you can go right down to the lowest formation, and each officer has his audience to address.

One very important point. *Insist* that orders are given as though the recipients were present, and as though the result of a

real fight depended upon them. What I mean is this : when you tell Captain B. to give his orders for the attack, don't let him hum and haw and answer something after this fashion, " I would call them up and say to them we are going to attack that funny-looking hill there, and I want Subadar So and-So to hack away somewhere up that spur to the left." And so on. No, that won't do. Make Captain B. give his orders exactly in the same form as written orders, in the same sequence and with the same definiteness. And make him enunciate with decision. Direct orders, in fact : not rambling statements in *cratio obliqua*. This question of verbal orders needs a tremendous lot of practice : it has been woefully neglected.

Remember this, too : if you are to cut any ice as an instructor you must yourself have thought out the complete answer to each question in advance. You must be fully convinced in your own mind of what you yourself would have done. That will give you a line to go on when you criticise other people's efforts. But don't ram this official solution down everybody's throat as the only possible line of action. Don't forget that every tactical situation can be correctly solved in a hundred and one different ways. But use your solution as a basis for healthy discussion. Discussion is of supreme importance : you must do all you can to encourage people to air their views.

Remember, however, that there are two main classes of folk who do the talking on these occasions. In one class is the fellow who knows what he is talking about and has something interesting to say. In the other is the man who doesn't mind what he says so long as he can hear the sound of his own raucous voice. Encourage the former for all you are worth. Muzzle the latter tactfully but firmly. There is indeed yet a third type, whom you will find tiresome but must yet suffer gladly : I refer to the man who asks stupid questions merely to show that he is taking an intelligent interest.

When you are dealing with a mixed force, get the layman to give the first opinion on a technical subject. Ask the expert for his opinion afterwards. Let the infantryman say how he would handle the guns before the artilleryman lays down the law. Discussion is bred thereby. But not only that: your infantryman is made to realise that, when he commands a mixed force, he commands all the component parts thereof; that he is as much responsible for the handling of his guns as of his infantry. This is one of the great points which you want to bring out in these exercises.

Having finished with one situation you issue a fresh narrative to take you on to the next. Your narrative is the means by which you control the proceedings and lead on from one lesson to another. Your narrative must follow the natural course of an operation in real warfare.

But don't have too many situations. Two or three carefully dealt with teach a lot more than a dozen skimmed over. Go in for few situations and many questions on each—rather than many situations with few questions. The reason for this is obvious. At these exercises you are striving to teach tactical co-operation—i.e., team-work, or mutual assistance between every part of a force. Obviously, then, if you ask a question about infantry in one situation, about artillery in a second, and about machine guns in a third, neither you nor your audience are any the wiser thereby as to how these can all work together and help each other to a common end.

If on the other hand you have one question on the handling of your infantry, another on the use of your machine guns, and a third on your artillery support, *all in one and the same situation*, you and your audience alike are bound to realise how the work of these arms is interdependent—to be fitted together like the pieces of a jig-saw puzzle. You are, in fact, teaching team-work as opposed to individual enterprise.

Now for a few general points which will bear repeating, though some of them I have already mentioned.

Make your scheme as realistic as possible, and make situation follow situation in natural sequence.

Encourage people to talk, but insist on their taking clearly and concisely *and* so that everybody can hear. Above all, insist on definite and incisive verbal orders.

Allow ample time for discussion. If your show is working well and your audience is interested you will find that discussion takes longer than you expected. It is better to cut out the concluding situation altogether than to curtail a discussion when people have got really going.

While encouraging discussion remember that you are boss of the show, and that it is up to you to lead the discussion along correct lines and to keep it to the point. Never let it degenerate into a mothers' meeting. Remember, too, that you will be no success as an instructor unless you can give better and more logical reasons for your decisions than can the other fellow. You have a great advantage over him. You have been working at the scheme beforehand, and should, therefore, have fully weighed the value of every possible solution. Make the most of this advantage.

Do not forget that there are invariably a variety of correct solutions to every tactical problem. As a rule it is not the decision which matters so much as the way in which it is arrived at. Logical thinking must perforce lead to a sound conclusion. When marking a practical examination this is a point of peculiar importance.

Much attention should be paid to problems of time and space. In all military operations these are of the utmost importance. Apart from questions of road-spaces and the like—of peculiar importance in mountain warfare—there are other problems of almost equal weight. A student, for instance, is detailing his plan of

attack for his advanced guard which is clearing the road for the Main Body. He has to avoid checking the Main Body; let him consider the time which must elapse before his orders can take effect; before they can trickle down to the lowest of his formation; how long it will take his infantry to shake out; how long before his guns can be in action.

It is only by careful working out that one can appreciate how long these operations take: the time is almost always underestimated. Remember: commanding officers have to give and explain their orders to their company commanders; company commanders have to get hold of their platoon commanders and point out frontages; and so on. All this takes a very long time, and failure to appreciate the fact makes the whole show unreal.

From the point of view of time-saving there is another matter which should always be considered: the correct position of the various commanders on the march. The force commander should be up with the advanced guard, the advanced guard commander with the vanguard, each accompanied by his various arm commanders, so that in each case the commander can quickly see the situation for himself and issue his orders there and then. An immense amount of time is saved thereby.

Give plenty of opportunities for practice in sending in written reports. Pay due attention to speed in the production of these, and make the sender think out how his message would go—whether by runner, by sowar, or by signal. Make him think where the recipient would be and how long the message would take to reach him. All this helps to make your exercise practical.

Don't overlook administrative questions: water, ammunition, the evacuation of wounded and so forth. Tactics without administration are like marching in running kit instead of F. S. order—pleasant but unpractical.

Now I think that I have been through most of the important points. And I hope that I have shown what a lot of work there

is in the preparation of one of these exercises. Some one once said that the requisites for setting a good scheme are 25 per cent. inspiration and 75 per cent. perspiration. That is true. But the energy so spent is never wasted—either from the point of view of the fellow who sets the scheme or of the other fellow who works it out. Undoubtedly the former learns a great deal more than do any of his disciples.

One further suggestion. Some schemes commanding officers should set and take themselves. But they should ensure that all their more senior officers get opportunities to set and carry out schemes whenever possible. Apart from the tactical training which the latter gain thereby, the experience will be of the greatest help to them later on when they command regiments in their turn, or when they have to assist in the conduct of practical examinations.

Finally, to sum up the requirements of a good scheme:—

- (1) It must be set with the object of teaching one main lesson. And that lesson should be embodied in its most salient feature.
- (2) It must be composed with imagination—to make it both interesting and realistic.
- (3) The greatest attention must be paid to detail. Realism again.
- (4) The force must be suitable both to the scheme and to the rank of the officers concerned.
- (5) The ground must be carefully selected—to fit the lesson and the force.
- (6) There must *not* be too many situations.
- (7) The director must be clear and logical in all that he says. And he must lay himself out to get students to state their views and so to provoke interesting and instructive discussion.

LIBRARY NOTICE.

The Secretary wishes to call the attention of members to the following points:—

- (1) Of late books which have been borrowed from the Institution have on some occasions been returned in a damaged condition; particularly maps have been removed and books thus rendered valueless.

Every volume is checked by the Librarian before issue and, if any deficiency exists, a note made to that effect on the Contents page. It will be necessary in future, in order to safeguard the interests of members as a whole, to hold individual members responsible for any damage done to books beyond fair wear and tear while in their possession.

- (2) Particular attention is called to Library Rule No. 7. If a member wishes to retain a book beyond the authorised period, he should notify the Secretary, who will sanction retention if the book is not required elsewhere.

Books are circulated only to individual members by name. They are not loaned to Messes etc., which subscribe to the *Journal*.

- (5) The following books are missing from the Library and cannot be traced:—

- (i) Sir Douglas Haig's Command and maps thereto (2 Vols.)
- (ii) Philip's Systematic Atlas.

Will the borrowers of these be good enough to return them?

Secretary.

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ISLAM AND THE TURKISH EMPIRE DURING THE GREAT WAR, 1914-18.

By Captain C. O. DeR. Channer.

I.

INTRODUCTION.

At the outbreak of war in 1914, Great Britain, as numerically the greatest Mahomedan power in the world, was vitally interested in the attitude of all other Moslem countries. Her communications to the East ran through the lands of the Turkish Empire, and spiritually Turkey was the leading power of Islam. If these countries combined against us in the war the position would be critical.

In this connection four considerations should be kept in view.

Firstly, Islam is by no means homogeneous in thought, as is often supposed. Besides the well known divisions of Sunnis and Shias, there are the four main sub-divisions of the former, Hanifis, Hambalis, Malikis and Shafis. The Shias of Persia do not recognise the Khalif, though orthodox Sunnis including the Hanifis of India, of course do so. The Khedive was avowedly Turcophile, but Arabia on the other hand put up with the Turks only because, as Sherif Hussein said, "they desired to strengthen the congregation of Islam." The unity of Islam, therefore, was more of an historical curiosity than a living factor.

Secondly, this lack of homogeneity made the success of a Jihad most problematic. Such a policy had failed in the Turco-Italian war at which time Mohamed el Idrisi of Asir was actually in the pay of the Italians.

Thirdly, the Committee of Union and Progress was frankly atheistic and nationalistic. The German Emperor masqueraded as Haji William and German officers donned Turkish uniforms. Germany believed that the Moslem world was a powder magazine ready for the spark. But religious movements require a moral

stimulus. Abdul Hamid had endeavoured to weld the Moslem world together by his policy of Pan-Islam, which transcended the limits of notional unity. But Enver and his party had as their motto in the Pan-Turanian movement:—

“Be a Turk—a Moslem if you will—but first and foremost a Turk.”

They imagined a world-war engineered by unbelievers like themselves to beguile the Moslem peoples of Asia and Africa. And so they failed.

Birth, too, counts for much among Eastern races, notably among the Arabs of long lineage. But Enver was of Polish extraction, Talaat was a Pomak—a converted Bulgarian—and Javid was a crypto-jew from Salonika.

Lastly, given a religious aspect to the war, it was fatal for Turkey to be allied to a Christian power. When Abdul Hamid waged war against Russia in 1876, he gained more honour among his co-religionists from defeat without infidel allies than ever would have been his from victory with them. German intrusion into the Hedjaz was always resented. On our part, we were always careful to send officers there by invitation only.

This paper is concerned with reasons for Turkey's entry into the war, the part the Germans played in the Turkish Empire, the disintegration of Turkey as the leading Moslem power, and destruction of her temporal power by the capture of her country and the annihilation of her armies.

II.

TURKEY'S ENTRY INTO THE WAR.

VARIOUS OPINIONS ON TURKEY'S ENTRANCE INTO THE WAR.

The plain man in the street had a feeling of resentment against Turkey for her ingratitude in siding against us. He had read the Prime Minister's words that her action was a “treacherous stab in the back.” Lord Cromer wrote that Great Britain had tried to help Turkey but that she had “scorned salvation.” John Buchan in his history talks of our “century-old friendship with Turkey.” So it is worth while to examine this salvation and this friendship.

The cynically minded will not believe in altruistic friendship in the diplomatic world, where salvation is offered at a price. Sir Auckland Colvin sums the question up very well in his book "The Making of Modern Egypt."

"Nothing should seem more unaccountable to future historians than the relation of Great Britain throughout the XIX century with the Sultan. At its commencement we are seen espousing the cause of the Turks against Napoleon; a little later we have sided with the Mamelukes, who have revolted against the Turks. In the course of a few years we are sinking the Sultan's ships at Navarino. But before very long the Turk is clinging to our skirts in the Crimea; then dazzling the British public with his diamonds at a monster ball in the India Office; only to be held up shortly to execration as the Unspeakable, the Bag and Baggage man, the congenial subject of Abdul the Assassin. When next we see this eccentric pair, the Briton is covering Constantinople with his guns, and shielding the Turk from the assaults of the Russian Army. Next Egypt is invaded by Great Britain to the violent displeasure of the Turk, and the Egyptian lamb is taken to the lion's bosom from under the knife of Abdul. When behold, in the space of three short years, the amazing inseparables are again before us bowing and smiling hand in hand together, British High Commissioner and Turkish High Commissioner intent this time on union of hearts, but only to be forcibly torn assunder by French and Russian diplomats, and doomed again to separation. It is little wonder that at the close of the century the Sublime Porte should prefer the vigorous embraces of the Teuton to the brief and ill-omened advances of his Anglo-Saxon cousin."

While Britons have accused the Turk of having "a double dose of original sin," can we blame him if he calls us perfidious? Throughout the past century British liberalism has been pouring out all its sympathy on the subject races of Turkey. But the Russian bogey was threatening our trade and communications in the Mediterranean and John Bull's love of clean hands struggled with the itching of his palm.

Briefly to summarise events from 1908 to 1914 ; a liberal constitution was promulgated in Turkey in 1908. Taking advantage of the resultant disturbances, Italy pounced on Tripoli, Austria seized Bosnia and Herzegovina, the Balkan war broke out in 1912. Turkey lost all European territory except Thrace, and she found herself without a friend in the world. As late as July 1914 she tried to form alliances with France and England. But we thought that Russia, our ally in the Triple Entente, would eventually seize Constantinople and so Turkey was driven into the arms of Germany.

So it came about that on August 2nd, 1914, Turkey and Germany signed a secret treaty at Constantinople to come into effect at once.

At this time Germany, who not long before had thought the whole of the Balkans was not worth the bones of a Pomeranian grenadier, was well represented at Stamboul. Wangenheim, the German ambassador, had been specially selected by the Kaiser and was a strong character. He possessed that combination of force, persuasiveness, geniality and brutality needed in dealing with the Turkish character.

Humann, the naval attaché, had been born at Smyrna. Weitz, the editor of the *Frankfurter Zeitung*, had spent forty years in the country and was always at Wangenheim's elbow.

This combination was more than a match for Sir Louis Mallet, Monsieur Bomhard, the French ambassador, and Giers, who represented Russia. The only English official in Constantinople who knew the country intimately was Sir Adam Block, and he was in Turkish employment in the Ottoman Public Debt.

It was said of old that great commotions arise out of small things but not concerning small things. We have dealt with the larger causes of the negation of British influence in Turkey. Two relatively small factors precipitated Turkey's entrance into the war.

(1) Turkey had two battleships building in Great Britain. After the Balkan War they had been subscribed for by the whole Turkish nation for a future conflict with Greece. Collecting boxes

x The London Convention of 1914 was a complete failure. The British Government was completely impotent.

Islam and the Turkish Empire during the Great War.

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x had been placed in every Government office, and there were over a million subscribers of a shilling each. The last instalment had been handed over on August 1st, 1914, and one of the ships was nearly ready for delivery. The country was to go into fête when it arrived. But on the outbreak of war with Germany, Great Britain requisitioned the ships. She had a moral right, of course, to do so, but this was the last straw for Turkey. The advent of the Goeben and the Breslau turned the scale.

(2) At 5 P.M. on August 4th, six hours before the ultimatum to Germany expired, Mr. Churchill and Prince Louis of Battenburg were in the Admiralty discussing the latest wireless messages from Sir Berkeley Milne, who was shadowing these two ships in the Mediterranean. Prince Louis remarked that there was still time to sink the Goeben before dark. But the ultimatum had not expired and Mr. Churchill dared not give the order.

I believe it was the Duke of Wellington who said that England wished to be governed by her gentlemen and not by her generals. But if at this moment we had had a general, or rather an admiral, in command, the matter might have been satisfactorily settled. The Japanese were cleverer than we in the affair in Chemulpo harbour on February 9th, 1904, where the first shot was fired nearly 48 hours before the formal declaration of war.

On the same day, at the very same hour, Admiral Souchon on board the Goeben received a wireless message from Germany saying :

"His Majesty expects the Goeben and the Breslau will break through."

Admiral Souchon immediately sailed for Messina, made his will, coaled his ships, and, with bands playing, left for the Dardanelles on the 6th. By the 10th he had passed through the Straits.

On August 11th the Turkish Cabinet held a meeting. When he entered, Enver Pasha enigmatically remarked :

"Unto us a son is born."

It was the announcement of the fictitious sale of the battleships to Turkey.

A little later, Javid Bey met a Belgian jurist in Pera and remarked :

"I have terrible news for you. The Germans have captured Brussels."

"My poor friend," replied the other, "I have even more terrible news for you. The Germans have captured Turkey," and he pointed to the Goeben and the Breslau lying at anchor in the Marmora.

The result of the battle of the Marne caused pressure to be brought by Germany. Turkey had wished to remain neutral till her armies were fully mobilised, but on October 29th Admiral Souchon bombarded the Russian ports. The Allies' ambassadors asked for their passports, and Turkey entered the war. Be it remembered, she had already been continuously at war for the last twenty years.

III.

THE FIRST TWO YEARS.

ATTITUDE OF MOSLEMS TO THE JEHAD.

On November 13th a Jihad was proclaimed and the Suez Canal Expedition was launched to advertise it. Pan Islamic propaganda was poured out. It was said that India was in revolt, that the Indians on the Canal were deserting, and that the Senussi were marching against us. But Islam was not deceived. Arabia held aloof. Egypt waited. In India the National Congress passed a resolution calling all Mussalmans to aid the British Empire "to prove to the great British nation India's gratitude for peace and the blessings of civil administration under her ægis for the last 50 years." For two years India presented a united front on everything that related to the war.

Still the Turco-Teuton brand of Jihad was very successful at first. The attack on Gallipoli was repulsed, and Enver Pasha boasted that he was the only man who had ever defeated the British navy. Aden was blockaded and the defensive attitude we were forced to adopt there told against us in Arabia. Kut-el-Amara was captured. Jemal Pasha scotched an Arab rising in Syria

engineered by the French. On October 26th, 1915, a Bulgarian patrol entered the Austro-German camp at Kaldowa. East and West had joined hands.

But the Allied plans had been slowly maturing, and that brings me to the subject of the Arab revolt.

IV.

THE ARAB REVOLT.

Arabs and Turks had never been friendly. The nimble-witted Arab regarded the Turk as a man of bovine intelligence and a bad Mussalman. But since the promulgation of the Constitution in Turkey on the deposition of Abdul Hamid, things had gone from bad to worse.

The Committee of Union and Progress wished to Ottomanise the Empire, while the Arab yearned for independence. The leaders of the moment were not strict Mussalmans and there could therefore be little sympathy between the two parties. Also, the Turkish Government threatened to enforce conscription in Arabia for the first time for four hundred years. And then as a final exhibition of tactlessness they proposed to recognise Ibn Saud of Nejd and el Idrisi of Asir as mere "kaimakams," a minor rank in civil officialdom.

We must now glance at the internal condition of Arabia and at the rulers whom the Turks had alienated.

NEJD.

In Nejd, Abd-ul-Azziz Ibn Saud ruled at Riyadh. He was of the Wahabi persuasion, intensely orthodox, acknowledging the Sultan as Khalif but brooking no interference from the Turkish Government. In 1913 he had severely defeated a Turkish column sent against him and the spoils of victory enabled him to equip his forces. His chief enemy was Ibn Rashid of Hail who was always friendly to the Turks.

YEMEN.

In the Yemen, the Imam Yahiya Ibn Mahomed Ibn Yahiya had come to an understanding with the Turks but was by no means happy with them. He really controlled only the highlands of the Yemen where the Zeidis chiefly live, and he was on strained relations with most of the other chieftains in the peninsula.

ASIR.

Asir was in part under the influence of Said Mahomed el Idrisi. This chieftain's family had originally come from Morocco, and was distinguished for its learning and piety. He was always at loggerheads with the Turks but his greatest enemy perhaps was the Imam Yahiya of the Yemen.

HEDJAZ.

Finally we come to the Hedjaz. In 1908 Sherif Hussein Ibn Ali had been appointed Emir by the anglophile Vezier Kiamil Pasha to please Great Britain and in the hopes that he would further Turkish interests. But he always cherished the thought of independence, and in the early days of his power, when he was ostensibly all that the Turks wished him to be, he slowly consolidated his forces. When war broke out he settled his differences with the Idrisi, and in 1915 tried to bring the Imam Yahiya and the Idrisi together. He sent his son Abdullah into Central Arabia to patch up the quarrel between Ibn Saud and Ibn Rashid, but in this he had little success. However, by the spring of 1916, Sherif Hussein was the most powerful ruler in the Hedjaz, with great influence outside it.

It was these jarring elements that kept the VII Turkish Corps and the 21st Division in Arabia. The prestige of the Khalif depended so much on his retention of the holy places. The Turk was watching the Arab. It was for the Allies to divert his attention.

As early as July 1915 Sherif Hussein had approached the authorities at Cairo on the subject of his adherence to the Allies. But as the French and British had not yet come to an agreement as to

their plan of action, his advances were somewhat inopportune. At this time he was doing fairly well for himself by drawing subsidies both from the Turks and ourselves.

Finally an agreement was come to with the Allies, but Hussein was chary of committing himself. At last, afraid that Jemal Pasha's reign of terror in Syria would pass on to the Hedjaz, he drew his sword to vindicate an Arab nation and raised the standard of revolt on June 5th, 1916.

On June 9th Mecca was captured. In two years the Turks were driven from the Southern and Central Hedjaz and 800 miles of the Red Sea coast. 40,000 Turks were captured, killed or immobilised. The loss of Mecca was a severe blow to the prestige of the Khalif, and the Turks made a point of holding Medina till the end of the war. But Turkey as a power in Arabia was finally smashed when the Emir Feisal and his followers entered Damascus on September 30th, 1918, as a direct result of Allenby's great victories in Palestine.

V.

THE GERMANS IN TURKEY.

We must now retrace our steps and examine the power which helped Turkey to resist so stoutly. Von der Goltz had long been in the country, but in 1913 a strong German military mission came to Constantinople under General Liman von Sanders. The position in August 1914 must have been curious, as there was also a British naval mission in the capital under Admiral Limpus.

In March 1915 Liman von Sanders was given the command of the Fifth Army in the Dardanelles. It is to his credit that for ten and a half months he never left the front, though Constantinople was less than twenty-four hours away by sea.

His memoirs show that he did not have a very happy time in Turkey. His surly temperament caused trouble immediately he came to the country. He regarded Enver Pasha as his rival and any German who was seen in Enver's entourage was visited with his displeasure. As for the Turks, they say of him that he was a "man

of mediocre intelligence and competence, a dour and hard German General." Later on, when in command of "Yilderim," they accused him of not adopting an elastic defensive policy. Of course he had weak forces, but the Turks say that, by putting all his reserves in the front line, he only made matters worse for himself.

However, he avoided an error later committed by Falkenhayn with dire results. For all his faults, he worked hand-in-glove with the Turks. His Chief of Staff in the Fifth Army was a Turk, Kiazim Bey, who later followed him to Palestine. The commanders of his Northern and Southern Groups in Gallipoli were the two brothers Isaad Pasha and Vehib Pasha, who worked extraordinarily well together. It was their ready co-operation which contributed so greatly to our repulse in August 1915.

GERMAN TROOPS IN TURKEY.

Germany supplied a number of Staff Officers, a few commanders, technical units such as wireless and engineer detachments, mechanical transport and a few German batteries, altogether some 15,000 men according to Turkish calculations. I believe that this total does not include the German Asiatic Corps, which formed the mainstay of the Yilderim Groups of Armies. The history of this Group is specially interesting to the British who have such intimate dealings with Oriental races.

After the fall of Baghdad Enver Pasha pressed Ludendorff to lend him German troops to re-take the town. Enver had made himself famous during the Balkan war for his recapture of Adrianople, and he evidently wished to repeat a like performance. But prestige is a will o' the wisp objective for the strategy of field armies, and Falkenhayn was subsequently to divert the whole force to the Palestine front, which was in a critical condition.

The composition of the German Asiatic Corps is given in the Appendix. The men were taken from volunteers from the Western Front and had to undergo a severe medical test. It was realised that it would be almost impossible to replace casualties later on owing to the poor communications in Turkey. Each regiment was

like a brigade of all arms on a small scale. The battalions were, 400 strong with 18 machine guns. The light machine gun was of the Bergamen system with a short tripod, and was aircooled. But, as three men were required to work it, the Turks themselves say our Lewis gun was the better weapon.

The infantry gun was made by Krupp. It had a short barrel of 7.5 centimetres calibre, a light shield and was used right up the firing line.

All the artillery had motor tractors and all transport was mechanical except that of the cavalry.

The armoured cars never came to Turkey as, when Falkenhayn inspected them, they could not move off the parade ground owing to their weight.

There were watchdogs, too, with the Asiatic Corps. The Turks were greatly struck with these. One officer wrote of them :—

“On the road their greatest enemies were female dogs. These would entice them from the path of duty, but difficulty was in some way obviated by drill and discipline.”

Each man came to Turkey with one ton of kit. As they insisted on opening their camp-beds when travelling by train, an enormous amount of rolling stock was required to move the corps. In fact, the first of these troops did not arrive in Palestine before the taking of Jerusalem. The corps was an expensive luxury for Turkey, but fought with great determination in the final phase of the Palestine Campaign.

Besides the Asiatic Corps, the Yilderim Group also contained the 4th, 7th and 8th Turkish Armies, and now the friction between Germans and Turks intensified.

Yilderim, the Thunderbolt, is a name famous in Turkish history. The Sultan Bayazid I's sobriquet was Yilderim. In the war against Napoleon in Syria there was a Yilderim Army. In the Balkan War the name was given to the Phantom Army, which was coming from Anatolia to reinforce the demoralised Turks in

Thrace ; but as a fact, it never existed. We Kut prisoners heard of this wonderful new Yilderim Army, which, commanded by Falkenhayn himself, was to consist of 600,000 men and was to sweep the British into the Persian Gulf. There is no doubt that the very name inspired the Turkish nation.

But Liman von Sanders was kept entirely in the dark as to the formation of Yilderim. All the excellent advice he could have given as to how to treat the Turk was ignored. The Headquarters Staff was almost completely German, and all the officers retained their German uniforms. There was only one Turkish officer of any rank attached to the Staff and he was only an assistant to the Chief of the Staff. Other Turks were attached for political reasons only. In many cases they had no offices, no tables and no chairs. The Germans did all the work while the Turks sat in enforced idleness. There is not a shadow of doubt that from this time onwards a feeling of increased resentment set in against the Germans. Yilderim came Germanised to Turkey and remained Germanised till its demise. It made the conduct of the war more difficult and increased mistrust. The Turks had accused Liman von Sanders in Gallipoli of wasting life in useless attacks. In Palestine they refused to fight for Falkenhayn. At the head of a good Turkish Staff, Falkenhayn would perhaps have commanded a good deal more confidence and success.

The " Q " Staff of Yıldırım, being all Germans, knew nothing of the Turkish wants. Gradually it came to cater for Germans only and their allies were neglected.

A greater scandal was the number of soft jobs on the lines of communication occupied by Germans.

Ludendorff himself says that this theatre had a most unsavoury reputation in this respect. Most Germans one met were busy buying butter, honey, and dried meat to send to their hungry families in the Fatherland. It was calculated that for every German at the front there were five on the lines of communication.

The manners of Germans, also, infuriated the Turks. German officers travelled in first class carriages and quite senior Turkish officers were given cattle trucks. At the beginning of the war von der Goltz used to drive about Constantinople in his car at high speed with a trumpeter to warn people to get out of his way.

There was one other complaint against the Staff. General Headquarters was at first established at Constantinople. As a Turkish officer writes :—

“Stamboul was not at all favourable to that sustained effort which is required from the members of a Headquarters Staff. Here, overshadowing everything, was the established tradition, to go to the office in the morning, to return in the afternoon. Work progressed slowly and with the passage of time. For these reasons we were glad to see G. H. Q. transferred to Aleppo where the Staff could work with greater singleness of purpose.”

Falkenhayn did not limit himself to military matters. He meddled with the Arabs, whom he bribed with German gold and among whom he sent German intelligence officers. He did not sense the natural jealousy of the Turk who saw very well that Germany was exploiting his country for future purposes. He quarrelled with Jemal Pasha over the command in Palestine about which the Turks were peculiarly sensitive. Finally Mustapha Kemal Pasha refused to take over command of the 7th Army in Yilderim.

VI.

THE DISINTEGRATION OF THE TURKISH EMPIRE.

In a letter written to Enver Pasha in the autumn of 1917, Mustapha Kemal gave a complete exposition of the state of the country; how the war had been brought home to Turkey more than to any other power; how the weakness of the civil administration had been increased by want, corruption and profiteering; and how the Germans were making a colony of the country. He bitterly regretted that the Germans had been given such a free hand and prophesied the internal dissolution of the country in the near future. He saw that decisive victory was out of the question.

As for the army, it was in a parlous state before the first offensive in Palestine. Detachments of recruits were sent chained together to the dépôts. Their attitude had changed extraordinarily from that of the men one met on the road in 1916 when Turkey was at the height of her success. In the 54th Division which was sent to the Caucasus in 1917 fifty per cent. was composed of immature youths of 17—20 and unfit men of 45—50 years old.

In Irak the men had had no letters from their homes for years and leave was impossible. After three years of war they had lost all hope in victory. Men and officers had little faith in their commander. Halil Pasha openly joked about carving out a Turanian kingdom for himself in Central Asia. Like his former opponent at Kut, he was a student of military history. While General Maude was methodically preparing his offensive, Halil was reading Napoleon's campaign of Marengo, planning to fall on the British rear at Amara by way of Khanikin and the Pusht-i-Koh. His dreams were his downfall.

As an instance of the morale of the Turks in Irak, a prisoner asked to be allowed to send a telegram to his brother in Egypt. In it he wrote ;

"Safely captured by the British."

On the Palestine front the odds were three to one against the Turks. What with sickness and desertion, von Kress required 4,000 men monthly in drafts to keep his strength up to 25,000. The Turkish cavalry consisted of a cavalry brigade of 600 sabres.

The artillery worked out to 270-200 guns in our favour not including our naval support. Moreover it must be remembered that the Turkish artillery had little ammunition, and the horses were so weak that near Gaza, for instance, the guns had to be manhandled or abandoned.

Each man's ration was down to 12 ozs. of flour, and each animal to 5 lbs. of grain.

In our Educational Training Manual morale is described as "a spiritual state, derived from instinct, fortified by habit, controlled by the will and inspired by an ideal."

But discipline, the will to conquer and high ideals had in the autumn of 1918, been replaced in the Turkish Army by the elemental instinct of self-preservation. With unsympathetic foreigners to command them, with a corrupt and enfeebled country behind them, with very little food inside them, and with an enemy in front of them who was renowned for his determination and tenacity of purpose, the Turkish Armies melted away before the British offensives in Palestine and Irak.

I have dealt at some length with this question of morale as it seems to me to be the great lesson of these British campaigns. In this age of machinery, one is apt to forget that it is moral force that is the driving power behind the materialism of modern thought and the mechanical character of modern war.

Bacon in one of his essays says :—

“Walled towns, stored arsenals, goodly races of horse, chariots of war, elephants, ordnance, artillery, all this is but a sheep in a lion's skin, except the breed and disposition of the people be stout and warlike.”

There is no more stout and warlike soldier than the Turk with a religious ideal behind him, and from the very first he was short of all this paraphernalia of war.

To quote some Turkish statistics, Turkey put 2,850,000 men into the field. In Gallipoli she lost 218,000 of the flower of her army. Nine divisions were destroyed in Irak. Her total casualties were 2,300,000. At the time of the Armistice she had about 200,000 men under arms. A like number had deserted to the hills of Anatolia as brigands. Over 2,000 guns had been lost. A quarter of the population had died of disease and massacre. No more sweeping example is afforded by the late war of Clausewitz's definition that—

“War is an act of violence which in its application knows no bounds.”

To quote our own regulations.

"The enemy's power of resistance was finally crushed. Pressure was brought to bear upon the enemy people to induce them to force their government to sue for peace."

To accomplish this we had put 2,100,000 men into the field against Turkey, and lost 276,000 casualties in battle.

On October 31st, 1918, Mustapha Kemal Pasha was called upon to rally the scattered remnants of the Turkish forces not far from the spot where, nearly eighty years before, von Moltke the Elder had said to Hafiz Pasha,

"To-morrow at sundown you will know what it is to be a commander without an army."

;

APPENDIX.

THE GERMAN ASIATIC CORPS.

Commander ... Colonel von Frankenburg.

Staff Major von Zulfrek.

Major Nazim Bey.

701st Regiment of 3 bns. and 3 M. G. Coys. of 6 guns each.

701st Heavy M. G. Coy. of 4 guns.

701st Trench Mortar Coy. of 4 mortars.

701st Field Battery of 2 cent guns.

701st Squadron of Cavalry.

The 702nd and 703rd Regiments were similarly organised.

CORPS TROOPS.

701st Regiment of Artillery consisting of:—

2 batteries of 4 10·5 Soda field howitzers.

1 battery of 4 7·5 field guns.

15th Anti-Aircraft Battery of two guns.

703rd Light Mortar Ammunition Column.

701st Field Company, Engineers.

1703rd Telegraph Company.

1724th Wireless Detachments consisting of:—

1 heavy wireless station.

8 portable wireless sets.

No. 1 Armoured Car Detachment.

No. 2 Armoured Car Section.

300th Sanitary Section.

218th and 219th Field Ambulances.

1 Depot Battalion.

The mechanical transport, consisting of 24 columns, besides M. T. Parks, supply companies, transport sanitary detachments and M. T. stations were pooled with the other formations in the Yildirim Group of Armies.

BRITISH CASUALTIES.

Killed.			Died of disease.	Wounds.	Missing and Prisoners.	Total.
Mesopotamia	...	15,261	23,578	51,386	13,494	103,722
Palestine	...	11,890	8,401	34,106	3,998	58,295
Dardanelles	...	29,461	4,061	73,481	7,652	114,655
Total	...	55,615	35,940	58,973	25,144	276,672

THE RECENT MILITARY SITUATION IN TURKEY.

By Major-General Sir W. Hastings Anderson, K.C.B.

In order to make clear the recent military situation in Turkey it is necessary to go back to the time of the Armistice, and to outline briefly the events leading up to the Mudania convention and the Lausanne conferences.

After our defeat of the Turks; the French "Armée de l'Orient" under General Franchet d'Espèrey and the British Salonika Forces under Sir George Milne advanced on Constantinople. The Turks acknowledged the British as their conquerors; but whereas the British policy became increasingly pro-Greek, and was mainly responsible for placing the Greeks in Smyrna, the French drew nearer to the Turks and encouraged the Kemalist movement, and British prestige with the Turk was gradually undermined.

The relations between the French and British commanders in Constantinople were not cordial and were carried on through a Liaison mission. The question of zones of military activity were acrimoniously discussed; General Franchet d'Espèrey asserted that military control in Europe was the sphere of the French, while the activities of the British "Army of the Black Sea" were confined to the Asiatic side. Actually French troops held Stambul and Gallipoli; while British troops were at Chanak and Scutari, and in and around Pera and Galata (the European quarter of Constantinople). These latter, the French maintained—and still maintain in theory—were merely in occupation of quarters on the European side for convenience, as guests of the French. The matter was referred to the home Governments, but was shirked by them, and theoretically, is still in dispute; its importance will be seen later.

By November 1920, the early signing of the Peace of Sèvres was expected; Allied High Commissioners arrived in Constantinople; and General Harington was sent out as Allied Commander-in-Chief.

The British force was to be reduced to 6 battalions and General Harington was informed that Peace would be signed 4 days after his arrival. At this time the Kemalist army was in its infancy ; consisting mainly of belligerent bands under certain energetic and patriotic Turkish soldiers, whose aim was the independence of Turkey. At their head was Mustapha Kemal.

Three important events occurred in November 1920, which had a considerable influence on the situation :—

1. The debacle of Wrangel's White Army, which was thrown into Constantinople 140,000 strong in complete destitution ; and some remains of which are still there.
2. The fall of Kars to the Soviet troops.
3. The fall of Venizolos ; and the restoration of the Royal Power in Greece.

From this time dates the Soviet influence at Angora and in Constantinople.

In May 1921 General Harington advocated the withdrawal of the British force from Constantinople as without definite military objective. His force was too small to impose its will ; and too large merely to show the flag. He went Home to represent this, and has held this view persistently ever since : but the military view was overruled by political exigencies.

He had not formed a high opinion of the Greek Army (of which the 11th Division was under his orders) ; but the Home policy was to believe well of the Greeks ; and our military attachés reports from Athens encouraged optimistic opinions of Greek military efficiency. The Cabinet ordered him to send General Marden, to report direct to the Home Government as to the state of the Greek army. General Marden paid a short visit to the Greeks in Anatolia and was favourably impressed with what he saw. In the latter months of 1921, the Greeks carried out a "reconnaissance in force" to Eskishehr but were not wholly successful, and came back. Later they captured Eskishehr and Afium Karahissar ; then carried away by enthusiasm for King Constantine, plans were made for the capture

of Angora. These plans were shown to General Harington; they were well conceived but complicated; and General Harington formed the opinion that neither the High Command, the staff, nor the administrative services in rear, were sufficiently well organised or trained for the operation contemplated. In spite of General Harington's warning, however, the operation was embarked on. It resulted in a check on the Sakaria river; the value of the Greek army was exposed to the Kemalists; the Greek staff proved incapable of directing the complicated plans: supply troubles began at once; and the Greeks were forced back to their starting point—Eskishehr and Afium Karahissar.

During these operations the presence of British liaison officers with the Greeks, and of French officers with the Turks, led to widely circulated stories of support and direction given to the opposing armies by the two leading allied powers. These did not improve British prestige with the Turk. The Kemalists made up their minds that with further organisation and training they could beat the Greeks, and they received both French and Italian help in smuggling arms and equipment into Anatolia. Our neutrality on land was maintained, although the Sultan's Government was encouraged to take action against the Kemalists; but the presence of the Greek fleet in the Bosphorus was permitted by us, and this was a great cause of offence to the Turks. The Greek finances failed; the army became discontented; politics were allowed to dictate the appointment and retirement of commanders; serious training for war was practically non-existent; and 1921 ended with the Kemalists taking heart, and with improved prospects for them of military action in 1922.

Early in 1922 it became evident that the Greeks were in difficulties with the maintenance of their forces in Anatolia, and in March they placed themselves unconditionally in the hands of the Allies. The Conference of Paris met, but the Turks rejected the terms offered, although all plans had been made for the Greek evacuation of Anatolia under Allied supervision.

The Greeks then appointed General Hadjianestis as Commander-in-Chief. He was an impulsive, hot tempered old fire-eater. Visiting the army, he led them to believe that they would shortly be withdrawn to a restricted front round Smyrna; and at the same time he withdrew a large part of the army to E. Thrace, with the intention of capturing Constantinople from the European side. The scheme was ill-conceived, and had no chance of success. It was met in July by a Communiqué, issued by General Harington, in which he warned the Greek commander that any crossing of the neutral zone near Chatalja would be met by Allied troops. He placed General Charpy (the French commander) in command of the Chatalja lines, and attached British and Italian troops to him. This stopped the Greeks; and provided excellent tactical training for the French and British troops under General Charpy, who is a first class trainer of men.

The Kemalists, finding the Greek army opposite them weakened by the withdrawal of troops to Thrace, and having spent the winter and spring in vigorous training and reorganisation, now prepared for an offensive in Anatolia. Their plan, prepared by Kemal himself with the assistance of Ismet and Rafet Pashas, was based on a thorough study of Lord Allenby's operations in Palestine in 1918. It was bold and brilliant in conception, and relied mainly on a very great weakening of their right, and a concentration of all available force on their left opposite Afium Karahissar. They expected considerable success; but the results far exceeded their expectations. The Greek army, distracted by political changes of command, rusty for want of training, and weakened by the idea of a withdrawal to Smyrna, put up no fight to speak of, and were routed. Anatolia was evacuated, and deplorable scenes were enacted in Smyrna.

The Turks, elated by their success, and now regarding themselves as the direct successors of the Turkish conquerors of the Middle Ages, turned to the Allies, who alone barred their advance into Europe. At this time—August 1922—there was one British battalion at Chanak, and two on the Ismid peninsula. In order to show allied

unity, General Harington asked the French and Italian Generals to supply troops on the Asiatic side at both these places ; and these were provided. A communiqué was addressed to the Turks, similar to that which had been issued two months before to the Greek Commander-in-Chief.

But the French and Italian Governments (reverting to the spheres of military influence in Asia and Europe already referred to as an unsettled controversy) ordered the withdrawal of their detachments to Europe, and the British troops were thus left in isolation on the Asiatic side of the Dardanelles and the Bosphorus to face the advancing Turks.

The Turks concentrated opposite Ismid and Chanak, and General Harington withdrew all British troops from the Chatalja lines and reinforced Chanak.

There are one or two points about the defence of the Dardanelles and of Constantinople, to which attention should be drawn.

As regards Chanak, the size of our force, then or later has never permitted us to guarantee the safety of merchant shipping passing through the Dardanelles ; it has always been possible for the Turks, notwithstanding the presence of the Chanak force, and the support of the R. N., R.A.F., and heavy guns sent out as reinforcements, so to place guns on the Asiatic side as to shell the straits. The emplacement of counter-battery guns along the eastern coast of the Gallipoli peninsula (as these arrived) was rendered difficult by French objections. They regarded Gallipoli as part of their European sphere of activity, and though not actually objecting to the landing of the guns, they found many arguments against their being placed in position, or against the gunners occupying available billets near the emplacements.

As regards Constantinople, its defence is on the Asiatic side ; the Dodurlu-Maltepe line. This line, as regards the half for which we had been responsible, had been prepared, dug and wired. The French, however, in the short time they had been there had done

little, and the withdrawal of their troops rendered it impossible for the British force to hold the line; withdrawal to a shorter line close round Scutari with the town at our backs was forced on us. At no time could we spare more than 3 battalions, one brigade R. F. A., and three squadrons of cavalry for the defence on this side. If seriously attacked, therefore, withdrawal from Scutari was bound to follow; and when Turkish guns should reach the Asiatic shore of the Bosphorus the fleet and transport anchorage would at once become unsafe. With sea communication insecure Constantinople must be evacuated.

In September 1922, then, the situation at Chanak and to a less extent at Scutari was serious, a military conference of Allied Generals and Ismet Pasha was summoned to meet at Mudania and vigorous action by Mr. Lloyd George's Government hurried out British Naval, Military, and Air Force reinforcements to General Harington. Preliminary arrangements were also made at Home for the mobilisation of the 1st and 2nd Divisions, although general ignorance of the situation; extreme aversion to any war measures; and the vigorous opposition of the Labour party; made it extremely undesirable to take serious steps leading to mobilisation. General Harington had a very difficult part to play, in the first week of October, when the Mudania Conference met, he was still extremely short of British troops, and deprived of active Allied support at the decisive points; the feeling of the British colony in Constantinople, and of the entourage of the High Commissioner, was extremely bellicose, and cold feet were freely attributed to him. As the Conference at Mudania proceeded, reinforcements were arriving, and each day's delay strengthened his hand. His patience, firmness, and obvious sincerity, backed by the vigorous action of the Government had their effect on Ismet Pasha, and enabled General Harington to overcome the machinations of Franklin Bouillon, and to secure firmer support from the French and Italian Generals, both genuinely eager to back their colleague, but tied by the instructions of their Governments.

The Turkish plan was to pin down the British troops ; and to do all in their power to provoke a conflict. The admirable self-restraint and discipline of the British troops prevented this, and on the 11th October, the Convention of Mudania was signed. By this time almost all the British forces referred to in the list of troops which forms an appendix to this paper had arrived.

The main points of the Mudania Convention were as follows :—

1. The Greeks to evacuate E. Thrace and to be behind the Maritza by the 30th November.
2. The Turks to place 8,000 Gendarmes in E. Thrace to police the country.
3. The transfer of E. Thrace from Greeks to Turks to be supervised by the Allies.
4. No reinforcements of British troops in Asia.
5. No fresh digging or wiring by British troops in Asia.
6. Lines of demarcation to be fixed between the British and Turkish troops ; no Turkish advance to take place beyond the demarcation line ; or of British from the positions held at the time of signing.

Incidentally the trust of Ismet and the Turks in the sincerity and straightforwardness of General Harington, as a result of their contact with him at Mudania, has been a potent factor in our military relations with Angora ever since.

In order that the Allied troops might supervise the transfer of E. Thrace from Greece to Turkey, the country was divided into three zones as below ; and troops were despatched there at once (15th October) :—

British Zone—South and West 3 battlions—
Sussex,
North Staffordshire,
Gordon Highlanders.

French Zone—North and East—3 battalions,
1 squadron.

Italian Zone—South and East—1 battalion.

An Allied mission consisting of officers of all three nationalities accompanied each Allied battalion to arrange the actual transfer of civil authority, and to carry on in the interval between Greek departure and Turkish arrival. The transfer was complicated by the incontinent flight of the Greek population, terrified at the idea of the Turkish advent, and quite determined not to await the evacuation of Greek troops, which according to the official programme should have preceded the move of the civil population West of the Maritza. The military evacuation was well carried out by the Greek commanders, and thanks to the work of the Allied missions and troops the transfer was carried out successfully, and with few incidents. Such as occurred were magnified many times by Greeks and Turks, but actually the murders, rapes, thefts and outrages which took place were not greatly above the average in times of so-called peace. By the 30th November the transfer was completed and the Allied troops had been withdrawn; a French battalion and squadron, a British battalion, and an Italian company being left on the right bank of the Maritza, to guard against incidents between Greeks and Turks and to hold the road and Railway Bridges over the river. We were glad to get our troops back; for the enormous extent of country had necessitated wide dispersion of small detachments, at a time when such communications as exist were blocked with mud and snow, making supply very difficult, while the accommodation for the men was wretched.

When the Mudania Convention was signed by the Generals, it was hoped that the Peace Conference would meet at once (20th October) and that the early signature of the Peace Treaty would soon settle their interim arrangements. But the change of British Government; delays in selection of a suitable place and of suitable hotel accommodation; and meetings of Lord Curzon, Monsieur Poincaré, and the Italian Ambassador in Paris, delayed its opening at Lausanne until 20th November; and when it did meet, it lasted till 5th February 1923; and, after breaking up, it reassembled in May and sat until the final signature of Peace on 25th July 1923.

The main effects of this delay, on the Military situation, were threefold—

- (i) Time was given for the Greek armies to recover from the extreme demoralisation consequent on their route by the Turks last autumn ; to reorganise, and after the political upheaval of last winter, to settle down again under the Republican Generals, who are their best leaders.

The Greek army therefore again became an increasingly dangerous factor in the situation.

- (ii) The Turks, at first satisfied with the 8,000 Gendarmerie allotted to them for the policing of E. Thrace, pending a permanent settlement, became frightened of renewed Greek aggression and organised forces secretly in Thrace in defiance of the Mudania Convention. Later, in May and June 1923, these were withdrawn, and British destroyers captured men and guns in the Sea of Marmora on their way back to Anatolia.

- (iii) The Turks also had time to train and reorganise, while we, tied by the Convention to a defensive attitude and unable to dig, wire, or reinforce in Asia, had to play a purely passive rôle ; and were unable to carry out our winter trooping relief programme.

During the winter, when practically no movement of large bodies was possible, these factors were not so serious, but their military importance was emphasised as spring and summer dried up the country and rendered movement easy on the roads and across country in Thrace and Anatolia.

To return to the narrative of events in Constantinople ; on the 5th November, the Sultan's Government was overthrown, and the Kemalist regime was installed in Constantinople under Rafet Pasha, who was ostensibly on his way through the capital to take up the administration of E. Thrace. With the exception of triumphal arches bearing Mustapha Kemal's picture surmounted by Turkish—

(and often by French)—flags; of much speech making, and processions enlivened by a certain amount of promiscuous revolver shooting, the transfer of Government passed off peacefully; but further difficulties for the Allies began at once.

The Angora Turks, while reorganising the Mudania Convention ignored the Mudros Convention of 1918—in which they had taken no part—and which governed the allied military occupation, the neutral zones, and the general system of allied military administration in Constantinople and Turkey. In the view of the Grand National Assembly, the actual presence of allied troops in Turkey, and the inherent right of an army to defend itself, were facts which had to be recognised, but they constituted no right to control in Turkey or in Constantinople by the allied commanders, whose troops were regarded as the “honoured guests” of the Turks in their country and their capital.

The fundamental difference of view as to the military position in Constantinople led to interminable conferences between the allied Generals and Rafet Pasha on the subjects of customs, allied police, prison inspections, passports, postal and telegraphic services, censorship; control of the Bosphorus, and of land communications, and kindred subjects of a semi-military and semi-civil nature which were within the province of the Allied Commander-in-Chief. In all these conferences the Allies were on the descent of a slide, always surrendering details to the Turks which in themselves were not of sufficient importance to justify a rupture before the Peace Conference could meet: but which in the aggregate all favoured the Turkish contention that we were in Constantinople on sufferance, and that the Allied Generals were cooperating with Rafet Pasha, rather than *vice versa*.

When Rafet entered Constantinople on 5th November the Allied Governments were asked to sanction a state of siege in the town; and the British Government sanctioned the measure. In a few days Rafet Pasha's attitude seemed to render further compromise impossible and General Harington decided on the morning of

10th November to disarm all the Turkish Gendarmerie and troops in the town, and to arrest certain persons in Pera (Guards Brigade) and Scutari (84th Infantry Brigade) in accordance with plans already made. This was to be carried out that night. But, to be effective it required simultaneous action by the French in Stambul, and the Allied Generals therefore met to discuss the matter. It became at once apparent that neither General Charpy nor General Mombelli were prepared to act without direct instructions from their Government regarding a state of siege, and these had not been received. More than this, the French and Italian Generals were of opinion that the situation with Rafet Pasha still admitted of adjustment, and in fact that we could slide still further down the hill without loss of dignity.

In view of the necessity of Allied unity, emphasised in all our instructions, the Allied Generals proceeded to consider further compromise; and at this stage Rafet Pasha (who had doubtless got wind of what was in the air), was announced and asked for a private interview with General Harington. He expressed a desire for mutual accommodation, so as to enable his Government, which he represented as sincerely desirous of peace, to reach the Conference. In consequence of this and of the opinions expressed by the Allied Generals the disarming measures were countermanded. From this day's work, and from the Conferences with the Allied Generals and High Commissioners of the following days, it became fairly obvious that no guarantee would be forthcoming that Allied solidarity, if the situation so demanded, would be expressed in terms of fighting troops.

In these uncomfortable and somewhat undignified conditions the days passed until 20th November when the Conference met at Lausanne. To that Conference we had all looked forward as the end of our military difficulties. But in this we were disappointed.

Just before the British Delegates left Constantinople for the Conference the question had arisen of the personal safety of the Sultan and of the advisability of an Allied Guard outside Yildiz

Kisok where he was in residence. The French and Italian Generals had expressed themselves completely satisfied with the presence of the Grenadier Guards in barracks just outside the Palace, and declined to add troops of their own. Enquiries from the Chief Naval A.-D.-C. to His Majesty had elicited an assurance that the Sultan was fully assured of his own personal safety. But on the afternoon of the 13th November a mysterious individual who announced himself as the Sultan's bandmaster, appeared at British General Headquarters, and informed us that the Sultan's life was in danger, and that he desired to leave in a British battleship. Enquiries that night proved that the Sultan had been deserted by all his Ministers, and that the bandmaster, his doctor, and a few servants alone remained, in whom he could place absolute confidence. The situation was extremely reminiscent of the Arabian nights. In the early morning of Friday, the 15th November, while the Palace Guards were being relieved, the Sultan and his small son and seven faithful attendants left the Palace by a side gate, in torrents of rain, and were taken in two shut motor ambulances and placed on board the *Malaya*, which sailed for Malta about 10 o'clock, before the Palace officials had gone to summon His Majesty to prepare for prayers at the weekly ceremony of the *Selamlyk*.

During the sitting of the Lausanne Conference, difficulties in Constantinople, at Chanak, and in Thrace and Gallipoli continued; relations varying in tone with the reports, peaceful or otherwise, which were received from Lausanne. It appeared increasingly our duty to avoid any military action which might compromise a peaceful solution of the Conference, and this made it all the more necessary to prevent incidents with the Turks. On the 5th December the arrest by Rafet Pasha of Greek and Armenian refugees on the quay, who had allied passports but no Turkish visa, nearly precipitated a rupture. Marines with Lewis guns persuaded the Turkish Gendarmes to allow the refugees to pass to their ships but for some hours on that day things looked ugly. We were treated to tears and expressions of pained surprise at our action by Rafet Pasha, but on the following morning, fresh trouble was caused by Turkish Gendarmes endeavouring to search an Italian ship for Ottoman

subjects. A very large and stolid British marine at one end of the gangway, a very small and miserable Turkish soldier at the other, and an Italian officer gesticulating on the bridge, while the refugees herded in the forepart of the ship like cattle, was a spectacle striking enough to obscure its serious possibilities for the peace of the world. But Rafet Pasha had overreached himself; he had been too zealous, and after a protest from us to Lord Curzon at Lausanne, he was removed to his real duties as Governor of Eastern Thrace, and replaced by Selaheddin as Military Governor, while Adnam Bey—an idealist with a practical wife Halide Hanum, the celebrated Turkish feminist—was appointed Civil Governor of Constantinople.

This change of regime resulted in greater peace; the new Turkish civil and military governors had received orders that no incidents with the allies should arise; and relations became much more peaceful. The settlement at Lausanne of the main subjects of discussion with Great Britain, the discovery that the French were veering from the Franklin Bouillon attitude to one more in consonance with allied policy, and personal relations with General Harington and with Mr. Henderson, the acting High Commissioner, led to a decrease of French popularity and a corresponding increase of friendliness to the British. The action of the French High Commissioner, under instructions from M. Poincaré served still further to estrange Turkish military sentiment from the French. Selaheddin Pasha and the military party realised that we were the only people who might fight, and their respect for us, and their arrogant contempt for the other allies, seemed to increase accordingly; especially when the break at Lausanne on the 5th February 1923 showed that the outstanding points at issue were those which mainly concerned the French and the Italian.

The next definite military crisis came on 5th February, when Lord Curzon left Lausanne. He cabled that he anticipated no immediate military action on the part of the Turks. But what was the exact military position. Was the Conference postponed, or suspended? had it broken down? Was the Mudania Convention still in force, or not? Doubts assailed all the Commanders concerned.

The British Commanders at Chanak, at Scutari and Gallipoli, asked for instructions at once. Might we now dig and wire? could we send the Air Force to reconnoitre and bomb in Anatolia? General Harington wired for his Government's instructions; so did General Charpy; so did General Mombelli; so did Rafet and Selaheddin Pashas, so did the Greek Commanders. The only place where trouble occurred was at Smyrna. Here the Turkish Commander, fortified by the presence and advice of Fevzi Pasha (the C. G. S. and a fire-eater), put his mobilisation instructions into immediate effect and ordered all allied ships of more than 1,200 tons out of harbour. The American destroyers were said to come inside that tonnage (although they had a very substantial appearance to a landsman): the French Admiral refused to budge; our reply was to send a Rear-Admiral with a light cruiser to enter the harbour and join the light cruiser already there, reinforced by two battleships and an aircraft carrier lying outside.

In Constantinople itself Adnam Bey who was armed, as we knew, with an ultimatum to present to General Harington requiring him to withdraw the allied troops at once, cabled to Angora explaining that the presentation of an ultimatum to a hostile General was a military, rather than a civil measure, that the duty should be carried out by Selaheddin Pasha rather than by himself, and representing that if he presented the ultimatum he might in all probability be either shot or taken prisoner at British G. H. Q. Receiving no reply he took to his bed, and remained there till the crisis had passed. At an interview with Selaheddin Pasha, General Harington was able to explain that he was perfectly aware of the existence of the ultimatum, and that he had no intention of complying with it.

The Turks, always nervous of allied and Greek naval power had no intention of provoking a naval crisis, the Smyrna incident was smoothed over, and the military situation slid insensibly back into the old rut of bumping along somehow. But credit must be awarded to the deliberation of all military commanders, Allied, Turk and Greek, in not precipitating military action at

a time of great uncertainty when a single false step by any one of them might so easily have upset the doubtful peace of the Near East.

Reference has already been made to the military difficulties of the defence of the Dardanelles and the Bosphorus, where the brunt of any Turkish offensive must be met first and foremost by the British. These difficulties were increased by the installing of Angora civil administration in Turkey, for the Turks were thus supplied with a ready made secret service agency, while the growing probability of allied withdrawal made it extremely difficult for us to get agents. Sea power and air power would enable us to withdraw our troops and the small British colony (1,200) to safe concentration in Gallipoli; although the isolation of Scutari, and of the Aerodrome at S. Stephano, the dangers of masses of Christian refugees in Constantinople, and the necessity of holding Chanak till the Fleet could clear the Narrows and our troops from the Bosphorus could land at Kilia on the Gallipoli peninsula, made the problem no easy one. During the winter of 1922-23 all supplies and munitions except sufficient for immediate needs were shifted from Constantinople to Kilia which became our main base; our troops were cut down to bare necessities; and after the beginning of January, we were ready to move at immediate notice. The prospects of a winter in tents on Gallipoli were not exhilarating: but we could have done it. The French were not so fortunate. They had three months supplies stored in Stambul near the mouth of the Golden Horn, a colony of 10 - 12,000, and very little shipping. It was understood that they intended to sit outside Stambul, with their backs to the sea, eating their supplies, until the land or sea routes were open to reinforcements. This plan indeed left it open for French diplomacy to allege that the British had abandoned the Christians in Constantinople, by withdrawing to Gallipoli; but its military sanity appeared to depend entirely on the benevolent neutrality of the Turk. The greater part of their troops were Senegalese Mahomedans, and the brave and loyal General Charpy was not to be greatly envied his position. Never by word or look did

he indicate that he was not in complete accord with the instructions of his Government; nor did he ever allow the obvious divergence of his instructions from those received by the British Commander to affect his loyal and cordial attitude to General Sir Charles Harington, as Allied Commander-in-Chief.

The Italian plan was doubtful. Their military force was small, their colony was 15,000 strong, and they had considerable shipping; probably their 2 battalions would have left with the British, if the situation had arisen. In General Mombelli they possessed a commander of vigorous personality and high intellectual attainment. His logical mind and warm personal friendship for Sir Charles Harington and General Charpy helped greatly to ease the many difficult situations which arose in Constantinople.

This was the situation when I was ordered to leave Constantinople on the 1st March 1923. As regards the military situation at that time I can assert with confidence that the troops, British, French, Italian and Turkish were bored stiff with a situation which was neither Peace nor War, sick of endless delay, and of the hope ever deferred, of getting back to their Peace Stations, or to their homes. The Greeks, burning to avenge their disastrous defeat of the autumn of 1922, shewed greater enthusiasm, but even here it is doubtful if their eagerness for war penetrated far into the ranks, or below the Higher Commanders and officers who had suffered the disgrace to Greek arms.

The winter of 1922-23 was a period of great discomfort, and considerable hardship, for all troops outside the barracks of Constantinople, and economy and a coming budget made hutting and road making a slow business for us. But the spirit of the British troops was always high, and their confidence in General Sir Charles Harington was absolute: the Army's relations with the Navy and the Air Force were genuinely close and cordial: the services discovered each other in a way which could only be possible in a situation requiring constant watchfulness and intimate cooperation; with ever present possibilities of action in common, combined with leisure for hospitality, and for sport, games and recreation together.

As regards the Allies, in spite of divergence of political instructions from Home Governments, real comradeship and genuine friendship marked the relations between the allied generals and their staffs. British officers' wives were sent home during the crisis of September—October 1922, but the hospitality of the French and Italian commanders and their staffs (not of course to mention the Americans) was embarrassing in its liberality and its frequency. As regards regimental officers, relations were always correct and in many cases cordial: as regards our men, they did their training, and their guards, and their tour in the trenches, and they kicked a football and went their way supremely indifferent to crises and allies alike.

Since my departure from Constantinople, the Lausanne Conference has renewed its deliberations, and after negotiations extending over nine months Peace was signed on the 25th July 1923. During the interval, the Greek army was still further consolidated, and its threat on Eastern Thrace became more and more imminent. At one time it was within an ace of crossing the Maritza. The Turkish army has been disintegrating, and has become gradually less formidable; its fighting value has decreased about 50 per cent. It decided that it wanted to go home, and large numbers were demobilised, but it has always been held as a threat behind the negotiations at Lausanne. The Turkish non-observance of the Mudania Convention has been exposed to the world by the capture at sea of men and guns on their way from Thrace to Anatolia. The death of M. Stambulisky has probably made easier negotiations between Bulgaria and Greece over the vexed question of a Bulgarian economic outlet to the Aegean.

The Peace signed on the 25th July brings to a close the long drawn out drama of nearly 5 years negotiations with a Turkey defeated in the Great War. The two final conferences at Lausanne occupied 22 weeks of negotiations, and until the last moment the issue seemed uncertain. By the Treaty Turkey retains her footing in Europe absolutely: Adrianople and Eastern Thrace up to the

Maritza river become Turkish territory again, after a brief period of Greek administration; Bulgaria's right to an economic outlet to the Aegean is asserted. The Syrian question will be settled separately between France and Turkey. The Iraq boundary will also be settled by separate negotiation, within 9 months, between Great Britain and Turkey. Greece has settled all details of her numerous disputes with Turkey, and peace between Turkey and Greece is definitely made.

Belgium and Portugal will be allowed to share in a general way in the economic benefits secured to the Allies for their own Nationals.*

The Pre-war Ottoman public debt will be distributed between Turkey and the territories detached from Turkey after the Balkan and Great Wars. The question of the currency in which the coupons of the Imperial Ottoman Bank are to be paid is left for decision by private settlement. All concessions duly guaranteed to Allied Nationals before the 29th October 1914 will be maintained. Foreign Post Offices in Turkey are suppressed.*

The Anzac area in Gallipoli, including the graves of British, (and especially Australian) soldiers who fell in the Great War is ceded to the British Empire, and visits to it will be facilitated. Constantinople is to be evacuated by Allied troops within 6 weeks of the ratification of the Treaty of Angora. Turkey undertakes to admit complete freedom of passage to the fleets of the three Allied Powers through the Straits until the Straits Convention is enforced; and will not object to the stationing of one cruiser and two destroyers of each of the 3 Allies until the 31st December, or the enforcement of the Convention, whichever is earlier.*

It is permissible to regret that a definite peace was not imposed swiftly, sternly, and categorically on Turkey 4 years ago. The lesson is a bitter one; failure to take advantage of a favourable position is as fatal in diplomacy as in other spheres of human activity; and the toil and sacrifice of war may be rendered nugatory by vacillation after victory. Turkey would have accepted any

* These paras are extracted from the times.

reasonable terms dictated by a united Europe in 1919. But the Allies were not ready with their terms ; after two years delay, a peace was proposed but by that time the Anatolian Turks under the leadership of Mustapha Kemal, had recovered sufficient spirit to declare it intolerable. Greece was chosen as the Mandatory of Europe in Asia Minor, and Greece failed in her task ; the Western Powers have in consequence had to meet their defeated foe in the guise of a conqueror at Lausanne.*

Now, the seeking after concessions in Turkey will begin again ; nearly all the material attributes of civilisation in the Ottoman Empire have been introduced by foreign capital and concessionaires ; without concessions Turkey would have neither railways, nor electric light nor telephones. Asia Minor has been deprived by violence of its artisans, its hucksters, its merchants and its tradespeople who were mostly Armenians and Greeks.*

The position of Mustapha Kemal's Government at Angora has not yet attained anything like the stability of the Sultan's Governments ; it has often proved capricious and absolute, unrestrained by law, custom or tradition, and addicted to the practice of retro-active legislation. It still remains for this Government to ratify, and then to observe the terms of the new Treaty.

Finally any review of the military situation in Turkey in the years since the Armistice would be incomplete without reaffirming the unique personal position and ascendancy of the Allied Commander-in-Chief, Lieutenant-General Sir Charles Harington. His transparent honesty and singleness of purpose won the trust and confidence of Turks and Allies alike. To him more than to any other one man, the nation owes it that we have not been at war with Turkey on many occasions during the past two and a half years.

* These paras are extracted from the *Times*.

APPENDIX.

Forces in the Near East on 1st March 1923.**BRITISH.****I. BOSPHORUS.****CONSTANTINOPLE.****G. H. Q.****1st Guards Bde.**

2nd Grenadier }
 3rd Colstream } Gds.
 1st Irish }

11th Bde. R. M. L. I.
 Batty. R. F. A. (19th Bde.).
 Troop 3rd Hussars.

SCUTARI.**84th Infy. Bde.**

1st Bn. { N. Staff.
 { Duke of Wellington
 { (relief).

2nd Bn. { E. Yorks (relief).
 { 1/Essex.

1st Bn. Gordons.
 3rd Hussars less 1 sqn.
 19th Bde. R. F. A. (less one Bys.).

San STEPHANO (aerodrome 7 miles from Constantinople).

R. A. F. 3 sqns.

1 Coy. Gren. Gds.

1 Armoured Train, R. A.

II. DARDANELLES.**CHANAK.****H. Q. 28th Divn.**

1 sqn. 3 Huss. (less 1 troop).
 17th Bde. R. F. A. (4 Gun Bys.).
 5th Pack Bde. R. G. A.
 3rd Medium Bde. R. G. A.

85th Infantry Bde.

1st Loyals.

2nd Sussex.

85 Inf. Bde.

1st K. O. S. B.

2nd H. L. I.

2nd R. B.

KILIA (Gallipoli Peninsula).

2nd R. Fusilier.

5th Med. Bde. R. G. A.

1st Heavy Bde. R. G. A.

KILID BAHR (aerodrome).

2 sqns. R. A. F.

III. MARITZA river.

1st Buffs.

Total .. { 1 Cav. Regt.
 { 2 Bdes. R. F. A.
 { 1 Bde. Pack.
 { 1 Bde. Medium.
 { 1 Bde. Heavy.
 { 14 Bns.
 { 5 sqns. R. A. F.

FRENCH.

CONSTANTINOPLE (STAMBUL).

H. Q. and H. Q. Infantry.

6 Bns. (2 French, 4 Sengalese).

- 1 Sqn. Cav. (Spahis).
- 3 Bys. F. A.
- 1 Coy. Tanks.
- 1 Coy. Armoured Cars.
- 2 Sqns. A. F. (12—16 Planes).

CHATALJA Lines.

- 1 Battalion (Sengalese).
- 1 Sqn. Cav. (Spahis).

GALLIPOLI and BULAIR Lines

- 1 Battalion (Sengalese).

MARITZA river.

- 1 Battalion (French).
- 1 Sqn. Cav. (Spahis).

Total

{ 9 Bns. (3 French, 6 Sengalese)
 { 3 Sqns. Cav. (Spahis).
 { 1 Group F. A.
 { 12 Planes.
 { 1 Coy. Tanks.
 { 1 Coy. Armoured Cars.

ITALIANS.

CONSTANTINOPLE.

Corps H. Q. and Infy. H. Q.

- 2 Bns. less 1 coy.

MARITZA.

- 1 Coy.

TURKS.

I. Opposite SCUTARI.

1st Army.

III. Corps—3 Divs. 25,900 (rations).

Cav. Div. 1,150.

Reserve IV Corps—4 Divs. 18,000 (Dw—5,800 rifles).

2 Cav. Divns. 2,300

Say 50,000 (rations).

II. Opposite CHANAK.

2nd Army.

VI. Corps—3 Divs.—17,400.

Reserve—

(3 Divs.—17,400.

II. Corps { 1 Div. (BALI-
 (KESRI) 5,800. } 23,280.

5th Cav. Corps.—3 Divs.—3,500.

Say 45,000 (rations).

III. Round SMYRNA.

1st Corps—3 Divs. —17,400.

IV. In E. THRACE.

1 Gendarme Regt. at ADRIANOPE plus 19 Bns. distributed in E. THRACE and reserve troops.

Total 30—40,000 men in process of organisation.

V. Secret forces in CHATALJA area 4 Bns., say 3,000 (cadres).

VI. In CONSTANTINOPLE.

Possibly 15,000

To be raised in case of war,

say 15,000

30,000 (More or less organised).

Total Estimate Turkish forces (Rations).

I. Army 50,000

II. „ 45,000

1st Corps 17,400

In THRACE (with reserves) 30,000 40,000.

CHATALJA 3,000

In CONSTANTINOPLE 30,000

Say 175,400 180,000.

About 80,000, (ration strength).

GREEKS.

G. H. Q. SALONIKA.

I. On MARITZA.

IV Corps—3 Divs., say 40,000.

III „ 3 Divs. „ 40,000.

(1 Divn. at GUMULJINA).

1 Cav. Div. at DEDEAGATCH.

Behind above—

II Corps—3 Divs.—40,000.

II. Round ATHENS.

I Corps—3 Divs. ATHENS } 16,000
1 Div. LARISSA }

III. In Western GREECE.

V Corps—1 Div.—8,000

Total, say 140,000

Naval Forces.

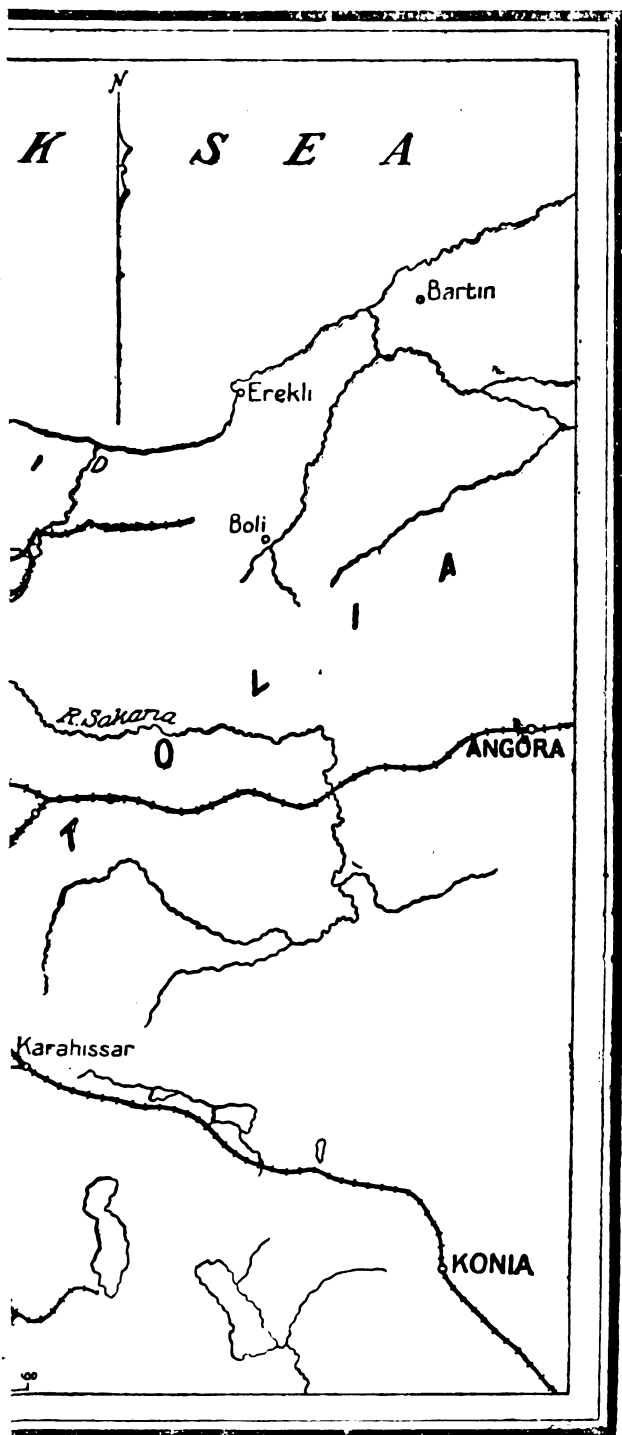
1. British Navy.

(Ships moved to and fro for practice, docking at Malta, etc., but the following is approximate):—

I. At CONSTANTINOPLE (Bosphorus).

Fleet Flagship—Iron Duke.

1 Battle sqn.



fresh

CE

- 1 Light cruiser sqn.
- 2 Destroyer Flotillas.
- Pegasus (Seaplane carrier).

III. At CHANAK (Dardanelles).

- 1 Battle sqn.
- 2 Light cruisers.
- Destroyer Flotilla.
- Ark Royal (Seaplane carrier).

(Partly Atlantic and partly Mediterranean Fleet).

- 2. French—Flagship (Battleship) and Destroyers.
- 3. Italian—Flagship (Battleship).
- 4. Spanish—Flagship (Battleship).
- 5. American—Flagship (Battleship) 20 Destroyers.
- 6. The Turkish navy is interned in the Golden Horn.—The GOEBEN lay off the Ismid peninsula with a nucleus Turkish crew under guard of a British ship.

THE NATION IN ARMS

By Captain C. F. Marriott, 20th Lancers.

Captain Logan's article in the *current number of the *Army Quarterly* entitled "Military Training To-day," is one with which for the most part all thinking soldiers must be in cordial agreement. But in one important instance he lays himself open to criticism, namely, in his contention that the days of national armies are numbered.

The composition of armies has varied in the past with social, economic and geographical conditions. Marathon witnessed a citizen force, raised by universal service, and led by experienced chiefs, victorious over a horde of mercenaries, stiffened by a few regiments of Persian and Median regulars. The Roman armies which overcame Hannibal and destroyed Carthage were essentially national in character, whilst that of Hannibal was mainly mercenary and entirely professional. In the early days of the second Punic War, the great Carthaginian taught his amateur adversaries a series of disastrous lessons, but at last the Nation in Arms wore down and obliterated the Mercenary State, which relied almost exclusively on a professional rank and file, whose ranks it was impossible to fill except by foreign condottiere. Eventually in its turn the Roman Army became completely professionalised, owing to the distance at which the wars of the later Republic and Empire had to be carried on.

Professional armies were supreme from the days of Augustus to those of Napoleon for the following reasons :—

1. Armament was extremely expensive and difficult to replace. There was throughout this lengthy period far less relative wealth and industrial plant in existence, than has been the case since the end of the 18th century.

* April, 1923.

2. The extremely backward state of communications, which made it impossible to organise national armies under professional leaders in peace, or to move them in war.

Feudal armies were therefore generally composed of a mixture of more or less professional soldiers assisted or hindered as the case might be by a mass of untrained peasant militia. Of such diverse elements were composed the Saxon levies which were cut to pieces at Hastings, and the motley array which went down before the English archers at Crecy. With the passing of time the peasant militia gradually disappeared, and the armies of Gustavus, Turenne, Marlborough and Frederick contained none but long service soldiers, though the methods by which they were recruited varied.

The French Revolution marked the end of the old professional armies of Europe. Assailed by Austria, Prussia and England, the new born Republic called every able bodied citizen to the colours. The considerable improvements which had been made in road construction during the 18th century, combined with the habit of systematic plundering to an extent previously unknown, permitted the masses of armed men thus brought into being both to manœuvre and to exist. Such was the origin of the Grand Army which triumphantly fought its way into every capital on the continent of Europe. Incidentally, in contradiction to Captain Logan it may be pointed out that almost every one of Napoleon's victories were gained over adversaries somewhat superior numerically, his success was due to a combination of rapid manœuvring, tactical skill, and sheer fighting power.

A word as to the four famous battles apparently cited by Captain Logan as examples of the inherent superiority of relatively small armies of long service soldiers. Philip of Macedon was victorious at Chaeronea over an untrained militia with such little military worth as it contained much impaired by political faction. At Breitenfeld an almost entirely national long service army, led by their own king, the first soldier of the age, overcame one made up of soldiers of fortune from almost every country in Europe, formidable enough fighters but with no national spirit or traditions.

Sedan remained for more than a generation the culminating triumph of a nation in arms. The luckless army of Macmahon which succumbed, was, owing to the pernicious system of substitution then existing, far more long service and professional in character than that of the victors. It is true that the fire power and discipline of the Old Contemptibles saved the Allied left wing from envelopment and destruction at Mons, but it was not until more than four years later, long after England had been compelled to expand her armies to the limit of her mobilisable man power, that victory was at last achieved.

The modern Nation in Arms, that is, the passing of the entire manhood of the state through the army, the large permanent staff of which from *Maréchal de France* to *Maréchal de logis* devoted their lives to the efficient conduct of their country's military affairs, was inaugurated as a definite system by Stein and Scharnhorst in Prussia during the years which followed Jena. The construction of railways and the industrial revolution which developed in the decade which succeeded Waterloo, greatly facilitated the task of those who continued to expand the national military resources on these lines. Sedan and Sadowa made the Prussian system the model upon which every power except Great Britain and the United States trained and organised their armies. In the midst of the Great War the stern logic of realities compelled both to follow suit. By the terms of the Treaty of Versailles, in order to weaken Germany, it was enacted that her military forces must for the future consist entirely of a limited number of long service volunteers.

This article is not written with the object of advocating Universal Service in England. For better or for worse the nation has made up its mind to continue as a military power much as we existed in 1914, trusting to our position as the traditional arbiter of Europe, and to our ability again to raise a vast national army should ever the need arise. What I do wish to emphasise is that no long service force, which must of necessity be comparatively

destitute of reserves, can ever hope, so far as we can foresee the future, alone to grapple successfully with a first class power organised as a nation in arms.

In 1914 we possessed, including British troops in India and the Crown Colonies, but excluding the Indian Army, the equivalent of ten divisions. Our military budget bore the cost of only seven of these in addition to that of the Yeomanry and Territorials, but it was equal to that of France before the reintroduction of the Three Years Law. These ten divisions had behind them reserves amounting to a total of about 200,000.

I should imagine ten divisions to be the largest striking force any nation could afford to keep up on a long service basis, bearing in mind the labour market with which it would be compelled to compete. Captain Logan does not appear to take much account of the Corps de Sûreté, retained to all intents and purposes at full war strength, more particularly by both France and Germany, in the years which preceded the outbreak of hostilities. They amounted to eight divisions in each case and I can assure Captain Logan from personal observation, that no ten divisions of long service troops, however efficient, could ever have hoped to make any serious impression on these frontier formations before the remaining active divisions, 37 in the case of France, 42 in that of Germany could have been brought into line. Again presuming Germany be permitted to enlist as large a voluntary army as she pleases, which as I have pointed out above could hardly exceed a striking force of ten divisions, would this force however carefully trained and equipped stand the slightest chance against the 40 divisions which the French could bring against them within a fortnight of the declaration of war.

I do not know what were the experiences of Captain Logan in the late war, but to the writer by far the bitterest was to witness the companies which represented years of assiduous training, simply melt away within a few days of first coming into action. Right up to the last, despite tanks and every other man saving device, our

casualties were desperately high. The German armies gave way less to the efficiency of the various new engines of war brought against them, than in obedience to the inexorable results of attrition. It is a well known proverb that omelettes cannot be made without breaking eggs. The eggs in the basket of a professional long service army are of necessity limited.

AN ECHO FROM THE PAST.

The original of the letter which follows has been most kindly presented by H. E. the Commander-in-Chief to the United Service Institution of India, where it can be seen in the reading room.

The letter was written by Lieut. Hodson, a little more than a month after the fall of Delhi. The inviolability of pledges given by responsible British officers is a principle of cardinal importance, but one which is not invariably observed by Government. The case could not be better stated than it has been by Lieut. Hodson in para. 5 of his letter—[*Editor.*]

From

Lieut. W. S. R. HODSON,

ASST. QR.-MASTER GENERAL AND COMMANDANT IRREGULAR
HORSE.

To

G. B. SAUNDERS, Esq.,

COMMISSIONER AND AGENT TO LT.-GOVERNOR, N.-W. P.,

DELHI.

Dated Camp Delhi, 30th October, 1857.

SIR,

I have the honour to acknowledge the receipt of your letter No. 1, dated 29th instant.

2. I guaranteed to Hamid Ali Khan his life, and protection provided that no act of atrocity or treachery towards Englishmen, or their wives or families, should after due enquiry, be substantiated against him, and no heinous crime or outrage should be shown to have been perpetrated by himself personally. I acted in this matter under the authority of General Wilson, then Commanding the forces before Delhi, who gave me specific permission to protect any persons who might have been useful in sending intelligence from the city during the siege. I had previously, moreover, ample authority to act to the best of my judgment in such matters from

the late Major-General Sir Henry Barnard, K.C.B., as also from His Excellency the late Commander-in-Chief when appointing me to the duties of the Intelligence Department with the Army in the Field.

Hamid Ali Khan's services commenced from the time the Force under Sir Henry Barnard approached Delhi. He sent a confidential agent to me to the camp at Aleepore previous to the action at Badlee-ke-Serai, when I first became aware of the intention of the enemy to come out to meet us in the field. From that time to the end of the seige I was constantly receiving from Hamid Ali Khan both written and verbal communications, in a variety of ways by various hands, through every practicable channel; and by many an ingenious device.

Further he protected my messengers and secreted them in his house. The information he gave was undoubtedly both accurate and valuable.

3. I should be very sorry to take upon myself to say that anything he did entitles Hamid Ali Khan to be considered "as an adherent of the British Government in opposition to that of the King." In this sense I do not believe that there was an adherent of the British Government within the walls of Delhi. I am aware that Hamid Ali Khan was a constant attendant upon the King's durbar, more especially subsequent to the death of Mahboob Ali Khan. That he "shared in the councils of the Rebel Chiefs" is obvious. Had he not done so, he could not have given me the accurate information of their intentions and plans which he constantly did.

4. Whether or not the services of Hamid Ali Khan during the siege "were such as to entitle him to have them taken into consideration in mitigation of any punishment which may be awarded him for his open hostility to the British Government" or not, is a question for superior authority to decide, not for me. His "secret services" were, I presume, merely rendered to counter-balance his "open hostility" in the then (to Asiatic minds) improbable event of the restoration of the British authority,—the object alike of his hatred and his fears.

5. The question seems to me to be a much simpler one; although irrespective of the preservation or destruction of a worthless life such as that of Hamid Ali Khan, or the greater or less measure of punishment to be meted out to his villanies. The real question at issue is whether the promises of British Staff Officers made, with competent authority, at a time of extreme danger and difficulty when it was of the last importance to obtain intelligence at any cost, are to be respected or not. The recipient of such promises may be a scoundrel, or he may not; the judgment of the officer making them may be in fault; but if the service of the army in the Field is to be carried on at such a crisis as the present one, there can be no question, but that the promises of its officers should be held sacred. Secret agents are not usually the most immaculate characters. I know nothing of Hamid Ali Khan to lead me to suppose that he is an exception to the general rule, but he served the State in time of need and the promises held out to him as an inducement to do so should not now be called in question.

6. Hamid Ali Khan's property has been plundered and his house gutted, since the British Troops entered Delhi. It should be remembered that he was twice robbed and imprisoned by the rebel troops during the siege on suspicion of furnishing us with information. He is now again in confinement on the charge of being "openly hostile" to the British Government; the written protection which I gave him to enable him to place his women and children in safety at their native village having been violated, and all the property in their possession taken from them.

I have the honour to be,

SIR,

Your most obedient servant,

(Sd.) M. S. R. HODSON.

To

C. B. SAUNDERS, Esq.,

COMMISSIONER AND AGENT TO

LIEUT.-GOVERNOR, N.-W. P.,

DELHI.

Camp Delhi, October 30th, 1857.

REVIEW.

A LIFE OF SIR EYRE COOTE.

By H. C. Wyllly, Oxford.

A life of Sir Eyre Coote such as Colonel Wyllly has now written has long been a want for those who would study the earlier campaigns in India, and the anvils on which the old Coast army with its magnificent record was hammered. The story of Sir Eyre Coote is the story of the formation of an army from a mass of trained bands, and it is the story of the British Army in its first ventures in this Land for it was the unit with which Coote first came to India, the 39th, that bears the record and the motto "*Primus in Indis*." From his first appearance as Captain Coote commanding the King's troops at Plassey, to his death at the age of 58 from a stroke at sea,—war-worn defender of the Carnatic, and Commander-in-Chief in India in the administration of Warren Hastings,—his life is one epic of service, and his name the name of names for a generation to the Indian soldier of the South.

1757, when affairs at the Madras Presidency were at their worst and the French were like to drive the British into the sea, saw "*Primus in Indis*," the 39th under Lieut.-Colonel Aldecron arrive on the coast; and in a short time Coote with a detachment found himself with Clive moving on Plassey, and taking an important share in that somewhat trivial though epoch-making victory. His pursuit of the French with a mixed detachment brought him consider *kudos*, though he did not entirely appeal to Clive. Shortly after, economy demanded the return of the 39th and Coote found himself in England. The next year, the despatch of French reinforcements to the Carnatic compelled England to follow suit, and the

79th were despatched followed by the 84th, specially raised from drafts from the Line. To the command of this corps Coote was appointed.

On arrival at the Coast he found the French pressing hard on the Company's troops and the 79th, and was appointed to the command in the Carnatic. Despite great troubles in both money and transport, troubles which dogged the British arms for the next twenty years, he inflicted such a defeat on the French at Wandewash as broke their power for all time, taking prisoner Bussy, also the French Quartermaster General, many officers, and about 250 men chiefly Europeans. As in later years, the French Regiment of Lorraine formed in column withered before the fire of a British line two deep. Following the victory over the field army at Wandewash and subsequent operations Coote moved to capture Pondicherry, which surrendered after some sharp fighting on the 16th of January 1861, and with it the redoubtable Irishman Count Lally de Tolendale who had so long led the French against the British. This ended the French power as such, but not their activities in the various native states that opposed the British, whose last trace died away with Allard and Ventura in the Sikh times, nearly a century later. During these operations and especially in those against Hyder Ali later, we constantly find the trouble that occurs through the absence of any proper military bureau at the headquarters of Government, of the organising faculty to supply the troops, of any clear line of authority. Civilians interfered fatally with operations, soldiers at times interfered with the responsibilities of the civil power and so forth.

From Pondicherry Coote was appointed to command the troops in Bengal and his time there was occupied in minor operations and in organising the Indian forces of the Bengal Establishment. In 1762 Coote returned to England, after a special mission on behalf of Government to Patna to endeavour to unravel the tangle in those provinces and to arrange to assist the Mogul Emperor Shah Alam to gain his throne. Here amid a mass of intrigue we find the Nawab of Bengal complaining to the Governor that Colonel Coote

"in a great passion with his horsemen, peons, sepoys and others, with a cocked pistol in each hand came uttering God-damees into my tent."

After his departure from India, Stringer Lawrence, the celebrated Madras officer, who was in England while Coote was in the Carnatic was made a Major-General and appointed the first Commander-in-Chief of the armies in India, a necessary appointment in view of the rapidly growing organised forces of the three Presidencies. In 1769 Colonel Coote was offered the succession to Stringer Lawrence, was appointed a local Major-General, and for the third time proceeded round the Cape to India, where the Carnatic was already in the grips of a war with its powerful neighbour of Mysore.

It is evident that Coote's name was one to conjure with among the sepoys of the Coast Army from whom he had obtained services far in excess of expectation, while his sojourns in Bengal had soon produced the same effect on the rank and file of that Province, so eagerly does the India soldier respond to the personal touch. But unfortunately for the State, circumstances compelled Sir Eyre Coote as he now was to return to England. On his landing at Madras and then proceeding to take command of the army and to carry out the reforms and military measures ordered by the Court of Directors, the Madras Government refused to recognise his authority, holding that the commission of their Provincial Commander-in-Chief, Brigadier-General Smith, was superior. The exact story is obscure and accounts conflicting, but Coote proceeded to Calcutta and immediately returned to England by the then unused route *viâ* Bussorah, to the Mediterranean, presumably travelling *viâ* Baghdad and Damascus. This, be it remembered, was nearly seventy years before Chesney's Euphrates Valley Expedition, but was no doubt rendered comparatively easy through the existence of the Company's factory at Bussorah (Baara), which stood where Messrs. Lynch's yard at Magill stands at the present day.

His Excellency may have been a difficult character, but when during his previous sojourns in the country he had found himself commanding in Madras and later in Bengal, he had encountered

governments in both Presidencies that had no experience whatever in handling and treating organised armies and His Majesty's troops. Of express purpose the Indian Army officers were not allowed to rise above the rank of captain, so as to ensure complete subjection to factors and writers who conducted the map-operations themselves as a magistrate would direct the operations of the district police. Small wonder that the Commander-in-Chief had to lay around to create an atmosphere in which the soldier could conduct the affairs that were reasonably his, and, what was more essential for the *Res Publica*, conduct operations in a practical and professional manner so that the best results should accrue from the exertions and sacrifices of the troops.

The Court of Directors very soon vindicated the attitude of their Commander-in-Chief in their despatches to the Presidencies, and General Clavering for the time succeeded to the command. Coote, who had only local rank, remained at Home in various colonel's appointments till promoted Major-General on the establishment.

During the period of Coote's residence in England Warren Hastings had entered on his great proconsulate, and the difficulties with his council and the opposition to his reforms had torn Calcutta. Coote was again asked to go to Bengal specially to strengthen the council there, and sailing in May 1778, arrived at Madras at the close of the year. Having assumed command, he issued an order to the army expressing his gratification at being among them again, and inspecting the troops at Madras on New Year's day was especially complimentary on the improved condition and organisation of the troops.

Thence he sailed to Calcutta and at once was enveloped in that extraordinary scene of intrigue and dissention that so evilly clogged Hastings' reign.

We need not follow the attempts to bring Coote into opposition to the Governor-General. He stuck as far as possible to his resolution to resist them, and he was for the most part on suitable terms with his chief, and was able to take his due share with him of the burden of rule and responsibility.

Coote was up-country in Bengal at the time of the duel between Hastings and Francis which he always said he would have prevented. He was to some extent the agent of Hastings in the political transactions of the day, and it is probable that he would have been involved in the charge against the Governor-General had he lived. We find Warren Hastings writing "what would poor Coote have suffered had he lived to have been placed where I have been. The first three days would have killed him."

Chapter IX and X give some interesting detail of life and controversy in Calcutta, and we then come to the story of the great combination of the South, with Hyder Ali as the leading personage, the Nizam assisting to drive the English into the sea. It was a popular war, almost a holy war; for the native Governments of the South, having broken off from their own allegiance to Delhi, were feeling that a greater than the Mogul is here. It may be that our own acts, for fear of the French, must at times have made us overbearing and wanting in goodfaith and obliged us to act brusquely for our own safety. Hyder himself had pointed this out to Coote, perplexed at the change of policy and disregard of promises that resulted when one Governor left for Europe and his successor ignored perhaps his guarantees, and thus engendered a fear which drove all and sundry to one vast struggle against us. Hastings realising the magnitude of the struggle pushed off Coote with any help he could spare, obtaining from the Court of Directors instructions that left Coote supreme save for the orders of the Governor-General in conducting the war in the Carnatic.

Immediately on Coote's return from the provinces of Bengal he sailed for Madras. And then began that two years of constant campaigning which saved the Carnatic but wore the commander to his grave.

It is not possible to follow the two years ceaseless war in which Coote found himself involved, always short of transport supplies and money to pay his troops. On first arrival it was necessary to get room to manœuvre and to relieve his besieged detachments.

A series of operations culminated in the epoch making victory of Porto Novo, after a prolonged wait on the coast for supplies and drafts, invested by Hyder. Porto Novo was again one of those decisive victories which saved us from expulsion, and enabled the army to get on terms with the invaders. Two more effective victories amid the marching and countermarching were achieved at Pollilore and Sholinghur. And still the tide of war rolled back and forward and Hyder's immense resources and genius for war time after time brought Coote himself post haste to relieve his frontier garrisons, the last time carried in a doolie past his cheering troops. At last in September 1782, worn to the point of death by fatigue and disease he returned to Calcutta. Soon after Coote's departure Hyder again rolled up the frontier and Hastings reluctantly sent him back in April 1783, with Lady Coote to the Carnatic. Chased by three French cruisers, the excitement brought on a stroke, and the war worn commander was landed at the Presidency but to die.

We need not further follow Colonel Wyllie in all the fascinating appendices and documents that he has selected from the mass of materials at his disposal. He has compiled a book of surpassing interest on a period of great importance, the succeeding crises of which are most confusing. It would, however, have aided the reader to follow the great moves in the game, had it been possible to compile a chronology to help in the constant back references that are necessary.

OFFICIAL HISTORY OF AUSTRALIA IN THE WAR, 1914-18.

VOLUME VII SANA'I AND PALESTINE.

By H. S. Gullett.

In the preface the author explains that he has set out to write a narration of the doings of the Australian Light Horse in the campaigns of 1916-1917 and 1918. The New Zealand Mounted Rifle Brigade is obviously intended to be included.

Of necessity the writer has had to deal with the strategical and tactical aspects of the operations under command of the General Commanding-in-Chief of the Egyptian Expeditionary Force.

His access to secret despatches exchanged with the War Office is duly acknowledged and appears to have emboldened him to indulge at times in criticism of policy and of the conduct of operations by the higher command hardly compatible with the scope of the book and of questionable taste from a pen other than that of a recognised military expert.

The book gives an accurate and pleasing picture of the men of the Light Horse, the overseas representatives of the British Yeomen, filled by the fine patriotic spirit, independent almost to a fault, and self-reliant to a remarkable degree.

The bond that existed between the men and their officers was nowhere stronger in the forces of the Empire than in the Light Horse; the loyalty and devotion mutually displayed by all ranks never failed. These factors alone were sufficient to form the basis of a magnificent body of horse.

In volunteering for service overseas all ranks were actuated by the same spirit which in their own country as a matter of custom impelled them to turn out and lend willing help to fight a common danger such as fire or flood.

It is a well recognised fact that the different countrymen of the British race have strongly marked and often widely divergent characteristics, which must be taken into consideration if the fullest value of an Imperial army is to be obtained.

Mr. Gullett has emphasised this point again and has done no mean service in this able description of the psychology of the Australian troops, who have their own methods and their own standard of discipline, outwardly lax, but of the kind that is pre-eminently successful in the stress of battle.

The officers and men of the force were undoubtedly intolerant of stereotyped service methods, which curbed their initiative and their resourceful natures. However, it is an open secret that the

Australians in the end generally got what they wanted and did what they wished. In some directions modifications in transport and improvements in the method of transporting the wounded, particularly adoptable to the desert, were introduced. In matters of this kind the inventions of the Australians might well have been adopted by the rest of the Egyptian Expeditionary Force.

The writer has succeeded in recording the exploits of a fine body of men, individual fighters, whose leaders were chosen from the ranks solely on their fitness as leaders.

Ancient history is freely quoted throughout the book, which contains also accurate descriptions of the country, and of the varied classes of inhabitants met. The enemy is generously treated and a high tribute is paid to the individual Turkish soldier.

The political aspect of the campaign is not overlooked. That the colonies of Jewish immigrants from Europe were not subjected to harsher treatment by the Turks is ascribed to the German policy which was averse to doing anything which might alienate the sympathy, and presumably monetary support, of the great Jewish money-lenders of Europe.

The writer has no love for the desert Arab or the faint-hearted tribes of Trans-Jardania, but pays a just tribute to Feisal's contingent, without making the mistake of describing their hit-and-run raids as pitched battles.

A feature that will go far to recommend the book to the members of the Light Horse and the relations of the fallen is the careful description of individual deeds and of minor actions. Biographical footnotes relating to all those singled out for individual mention are a happy idea.

But the reader is apt to tire of the continued appeals to sentiment and, if by chance acquainted with the aspect of mounted troops on active service, is unconvinced by the statement that swords and lances so often gleamed in the sunlight: swords are not often drawn in war and scabbards and lance points, even if not dulled as ordered in regulations, very soon become much too dim ever to catch the sunlight.

The writer is at great pains to praise the horse-mastership of the Australians. His comparisons however, make it justifiable to point out—

- (i) That their horses were from the beginning a particularly good stamp, bred in a hot dry climate.
- (ii) That the Australians were permitted to keep in their Mobile Veterinary sections comparatively large numbers of sick horses, which, in conformity with the recognised principles of the supply of remounts, would otherwise have been evacuated to the base.
- (iii) That the following are recorded figures of casualties (other than killed in action) of horses and mules of two divisions which did about the same amount of marching, period 19th September, 1918—16th November 1918: Australian Mounted Division, 2,578 horses and mules evacuated to Mobile Veterinary Sections out of a total of 8,420; 4th Cavalry Division, 1,462 evacuated out of a total of 8,882.

During the period quoted above, it is true, the 5th Cavalry Division had to evacuate to Mobile Veterinary Sections 2,727 horses and mules out of a total of 7,709, but it must be remembered that this Division went on from Damascus to Aleppo and in addition to the extra strain involved was on short rations almost continuously, whereas the other two divisions were able to supplement their rations from local sources and at the same time were comparatively inactive.

The book is interesting and full of adventure, which will commend it to the general reader. To the men whose deeds it so aptly describes it cannot fail to be a treasured record. From the point of view of the student of military history, however, it is questionable if the reader will be able to find time to study so lengthy a volume seriously. There are many illustrations but these are chiefly of a purely personal interest while the numerous sketch maps are on a small scale and lack detail. It is difficult to understand why a book included in the Australian

Official History of the war has not been supplemented by a series of maps, panoramas, and oblique aeroplane photographs in a pocket at the end.

The author has stated in the preface that no detailed account of the doings of other than Australian troops may be expected. To this no exception can be taken. But it must be pointed out that there is every reason to expect that such references as are made shall be accurate as regards the main facts.

For instance :—The capture of Haifa by the 15th Imperial Service Cavalry Brigade is dismissed with the remark that “the horsemen after being held up for a few hours by shells and machine gun fire galloped into the town. Several Turks were killed by the Indians in the streets and 135 prisoners and a few guns, including two naval pieces on Carmel, were captured.”

A more accurate account shows that a carefully planned mounted attack was carried out in the face of gun, machine gun, and rifle fire, and that at six different points guns or machine guns in action were charged. The total captures amounted to 1,351 prisoners, 17 guns, and 10 machine guns.

The operations of the 11th Cavalry Brigade on the 22nd—24th September 1918, are described as against a small column attempting to cross the River Jordan at Mukhadet Abu Naj, 5 miles south of Beisan.

The official account mentions a large column, sharp fighting, that one regiment captured 25 machine guns in a charge, and further reports the capture of 3,000 prisoners. A more detailed account tells of the enemy having had two batteries in action East of the River Jordan against the 11th Cavalry Brigade and that there were 700 Turks and 25 machine guns in action on a hill covering the crossing from the North. Against this latter position two squadrons charged home and captured it, suffering considerable casualties in doing so.

The finest tribute paid to the Australian Light Horse is found at the end of Lord Allenby's farewell letter, “The Australian Light Horseman has proved himself the equal of the best. He has earned the gratitude of the Empire and the admiration of the world.”

"THE WORLD CRISIS."

BY WINSTON CHURCHILL.

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A Review by Lt.-Col. A. B. Beauman, D.S.O., York & Lancashire Regt.

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To the average soldier the inner workings of the Navy are a sealed book. A few officers while garrisoning defended ports or holding staff appointments may be brought into contact with Naval organisation, and have their chance of studying its working at close quarters; but, nevertheless, many officers go through their service without any such opportunity.

This may be unavoidable, but it is none the less regrettable. Every war the British Army has ever waged is amphibious to this extent; the responsibility for its safe transport to the theatre of war and the security of its sea communications always have rested and probably always will rest, on the British Navy. In addition truly amphibious operations, such as the Dardanelles and the Archangel campaigns, in which Army and Navy fought side by side, are bound to recur.

It is, therefore, of vital importance that every officer should make the most of his limited opportunities to get a working knowledge of the principles on which the sister service fights and organises. Such knowledge will always be of great value in avoiding friction and wastage in time, labour and temper when Army and Navy work, fight, or train side by side.

An opportunity occurs in a careful study of Winston Churchill's "The World Crisis." As First Lord of the Admiralty during the most critical years the British Navy has ever experienced since the Napoleonic era, he has had an unequalled opportunity of studying not only the preparation and organisation of a mighty fleet for war, but its strategic handling after the declaration of war. In addition he has the advantage of literary

talents of a high order that enable him to give us a lucid and enthralling record of the work of the Admiralty during this period. He has steered clear of the danger of overburdening his work with Naval technicalities, and the result is a book that anyone, however slight his knowledge of Naval matters, can read not only with profit but pleasure. No officer should miss studying this brilliantly written book; many of the problems it deals with are of vital importance, not only to the fighting services alone, but to the whole British Empire.

To those who have not read it, and perhaps even to those who have, a few notes and extracts may be of interest.

Like ancient Gaul, this book may be divided into three parts: (A) Foreign and Home politics (chapters I to V and chapter XXI), (B) Preparing the Navy for War (chapters VI to X), (C) The Navy at War (chapters XI to XX). These will be dealt with separately.

(A) FOREIGN AND HOME POLITICS.

This part of the book only deals indirectly with Naval problems. Nevertheless it is of absorbing interest. In virtue of his position as a cabinet minister, and his close association with Sir Edward Grey (while still Home Secretary we find Mr. Churchill writing a minute to the Foreign Secretary suggesting a new foreign policy), he had an opportunity of watching from the inmost circle the gradual growth of those fierce European antagonisms that were destined to bring about the cataclysm that eventually convulsed Europe. In addition to giving a very clear and well balanced account of both home and foreign politics of this period, he is able to add some interesting side lights. We learn that not until the actual day of the famous Mansion House speech (a speech that shook every Chancellory in Europe and was the inauguration of a definitely Pro-French policy on the part of the British Government), Lloyd George had not made up his mind as to the line he was to take. Previously he

had been looked on as the leader of the "peace at any price" party, not only by the British public and the whole of Europe, but by his colleagues in the cabinet. Yet this speech was so decided in its tone that we find the following incident recorded as occurring on the next day :—

"We returned as fast as we could and found Sir Edward Grey in his room at the House of Commons. His first words were : "I have just received a communication from the German Ambassador so stiff that the Fleet might be attacked at any moment. I have sent for McKenna to warn him."

This was in 1911. Few of the British public, in those days of peace, prosperity and pleasure seeking, had any idea of the crisis through which they were passing.

This portion of the book, full as it is of incidents of historical interest, serves as an introduction to that period of Mr. Winston's career when, in the words of the Order-in-Council, he became "responsible to Crown and Parliament for all the business of the Admiralty."

(B) PREPARING THE NAVY FOR WAR.

This period, from October 25th, 1911, to the outbreak of war, covered a phase of intense activity in Naval circles. In one of the most interesting chapters in the book, Mr. Churchill sketches the character of those great sailors who controlled the destinies of the Navy during this critical period of transition, and during the early days of the war. Above them all towers the dominating personality of Lord Fisher. Mr. Churchill gives us a brilliant character-study of this great sailor, in which his genius, his driving power, and his uncontrolled ferocity against those who disagreed with him or opposed him, are clearly shown. The following extracts give the key to the character of this remarkable man : "For at least ten years all the most important steps taken to enlarge, improve, or modernise the Navy had been due to Fisher." "I found Fisher a veritable volcano of knowledge and of inspiration; and as soon as

he learnt what my main purpose was, he passed into a state of vehement eruption." "Ruthless, relentless, and remorseless were words always on his lips, and many grisly examples of Admirals and Captains eating out their hearts 'on the beach' showed that he meant what he said." "It is small wonder that his turbulent passage left so many foes foaming in his wake. The wonder is that he did not shipwreck himself a score of times. The buoyancy of his genius alone supported the burden."

The characters of other great sailors are more briefly, but none the less surely, sketched. Students of military history can hardly fail to note the similarity between the character of Admiral Sir Arthur Wilson, as sketched in the following passage by Mr. Churchill, and that of Stonewall Jackson as portrayed by Colonel Henderson in his famous life. "He was, without any exception, the most selfless man I have ever met or have ever read of. He wanted nothing and he feared nothing—absolutely nothing..... Everything was duty. It was not merely that nothing else mattered. There was nothing else. One did one's duty as well as one possibly could, be it great or small, and naturally one deserved no reward..... It made him seem very unsympathetic on many occasions, both to officers and men."

It is interesting to note that at this period Admiral Beatty was under a distinct cloud, for Mr. Churchill writes:

"I was, however, advised about him at the Admiralty in a distinctly adverse sense. He had got on too fast, he had many interests ashore. His heart, it was said, was not wholly in the Service.....he had already been unemployed for eighteen months and would probably be retired in the ordinary course at the expiration of the full three years unemployment."

But, fortunately for the Empire and for the Navy, Admiral Beatty claimed an interview with the new First Lord. Mr. Churchill was so impressed with his personality that he at once

made him Naval Secretary. The command of the Battle Cruiser squadron followed in 1913. All the world knows how brilliantly he justified Mr. Churchill's judgment.

To pass from the personal to the material, epoch making changes took place in armaments and design during this period. Perhaps the most important of these was the adoption of oil instead of coal as the main fuel for the Navy. Mr. Churchill shows the enormous difficulties that attended this step, and the no less enormous increase in efficiency that resulted from it. Hardly less important was the arrival of the 15-inch gun, the complete change in the War Plan of the Grand Fleet, and the gradual growth in power and efficiency of the Naval War Staff (answering to the Military General Staff). The soldier will wonder how the Navy had managed to get on so long without such an organisation. Nevertheless, its inception aroused furious opposition amongst the more conservative elements in the Navy—an opposition that has not entirely died down even to this day. Perhaps the thought that will haunt the speculative reader, after study of these chapters, will run something like this: "What would have happened if war had come in 1911 or 1912, before these innovations that so enormously increased the fighting power of the Navy were firmly established?" Doubtless the Germans were not up to their 1914 strength in ships or organisation at that time; but, nevertheless, it is an interesting speculation that even Mr. Churchill might find it difficult to answer.

(C) THE NAVY AT WAR.

From this portion of the book, two points will especially strike the military reader. First, the revolutionary effect of wireless on the strategic and even tactical handling of the Fleet, and secondly, the extraordinarily centralised system of control exercised by the Admiralty by means of wireless. To the soldier the perfection of wireless has made but little difference as yet. It has served as a useful subsidiary means of communication, and has been of importance in the co-operation between artillery

and aeroplanes, but it has led to no radical changes in fighting organisation or chain of command. With the Navy it has completely done away with the independence of the Admiral commanding a body of warships at sea. Nelson, when at sea, was completely his own master. He could receive neither orders nor advice from the Admiralty as long as he chose to remain at sea. But during the Great War an Admiral, so long as he was within range of the Admiralty wireless, was liable to receive the most detailed and peremptory orders from Whitehall. Even at the other end of the world, Admirals received relay wireless orders that must have hampered their freedom of action. The following message, sent to Admiral Craddock on the west coast of America, just before his disastrous action at Coronel is typical:—

“Defence has been ordered to join your flag with all dispatch. Glasgow should find or keep in touch with the enemy. You should keep touch with Glasgow, concentrating the rest of your squadron including Canopus. It is important you should effect your junction with Defence at earliest possible moment subject to keeping touch with Glasgow and enemy, etc.”*

The second paragraph, instructing a commander how to handle a unit under his direct command, will probably appear to the military mind as open to grave objection. It would have been unthinkable for the Army Council to have instructed Sir Douglas Haig as to how he was to handle a division under his command before a battle in France. Yet the Admiralty instructions in this case closely approximate to such an unthinkable situation. It is certain that most soldiers will consider centralisation carried to such extremes most inadvisable, and that the military system of leaving as much as possible to the man on the spot has overwhelming advantages. Probably many naval officers would subscribe to this view.

*It is only fair to state that this message was never received by Admiral Craddock and therefore was in no way responsible for the disaster. That fact does not however affect the argument.

A chapter that throws much new light on a much discussed episode is that dealing with the defence and fall of Antwerp. Mr. Churchill evidently feels acutely the criticism that he drew on himself by the prominent part he took in that operation, and he attempts at some length to justify both his policy and the part he played in prolonging its defence. He claims that five days were gained for the British and French field Armies in their race for the sea, and that this result was well worth the losses incurred. This claim is probably sound.

We learn, however, that during the siege Mr. Churchill wired to the Prime Minister "offering to take formal military charge of the British troops in Antwerp." The curious phrase "formal military charge" presumably means command. As Mr. Churchill's military experience was of the slenderest description, he can hardly complain if he is criticised for putting forward such a proposal, which was very properly refused.

It is possible within the space of a short review to touch on more than a fraction of the absorbing and important matters dealt with in this book. The book itself must be read to obtain an insight into the inner working and organisation of the most powerful and most efficient fleet that has ever held the seas. Mr. Churchill gives us a chance of obtaining this insight with pleasure and profit, and it is certain that anyone reading this volume will look forward to its sequel* with lively anticipation.

THE GALLIPOLI CAMPAIGN.

By A Student.

(Published by Sifton Praed and Co., Ltd. Price 3s. 6d.)

The author explains in the preface that his work is intended to be an aid to those preparing for army examinations. Like most "cram" books it affords a bold narrative of events which makes little appeal to a general reader. Unfortunately it cannot be said to

*The present volume only deals with events to December, 1914.

afford a useful guide to a candidate studying the campaign for examination purposes unless it be regarded as a brief introduction to the study of a more complete work on the campaign. The elimination of detail has been carried so far that the book afford little more than a statement of what occurred. With the exception of the final chapter, it is rarely that any suggestive criticism of the causes of failure or success is offered, nor is sufficient data given of the Commander-in-Chief's plans and the objectives aimed at in the various operations to enable the reader to draw his own conclusions. The maps provided are unsatisfactory and do not show a large number of localities mentioned in the text. This no doubt was realised by the author who in his first chapter gives a list of maps recommended for the study of the campaign.

"THE DECISIVE BATTLES OF MODERN TIMES."

By Lieut.-Colonel F. E. Whitton.

(Oxford University Press. Price 12s.)

Lieut.-Colonel F. E. Whitton has compiled an interesting and useful volume dealing with perhaps five of the most important military events since the rifle and breech-loader began to have their effect on warfare.

He has chosen Vicksburg, practically the turning point in the American Civil War; Königgrätz, which brought the German Empire into being; Mars la Tour, in the 1870 War, which put Germany at the head of Europe for so many years before her turn for her "peck of dirt" arrived; Tshushima, which definitely placed Japan among the World Powers; and the Marne, which smashed for all time, let us hope, the over-riding power of Germany, and which brought the British Army once more on to the Continent of Europe as a dominating factor.

As a book for casual students of military history or for those more particular students who would refresh their memories, Colonel Whitton's compilation is strongly recommended. It is a type of comparatively light military reading which would, at all times, be acceptable both to the soldier and to the civilian.

COURTS MARTIAL IN INDIA.

*By Major L. M. Peet, Offg. Assistant Judge, Advocate-General,
Eastern Command.*

(Thacker Spink & Co. Price 3s.)

An excellent handbook which gives in a concise and readable form a summary of the law and regulations regarding courts martial under the Army Act and Indian Army Act. The differences and similarities in these two acts are clearly elucidated and attention is drawn to the various pitfalls into which Staff Officers often fall in convening courts martial and those that frequently entrap the unwary presidents of such courts. The table on pages 26 to 32 shows concisely the differences between the two acts, and the pages dealing with the admissibility of evidence, and those dealing with the duties of the Judge Advocates' department are particularly valuable. At the end of the book is given an amusing example of a trial badly convened and conducted and a brief statement is also given of the mistakes made by the Court. It is a pity that the references made to A. R. I., Vol. II, refer to the obsolete 1911 edition and not to the 1923 edition now in force.

The book is clearly printed in a very handy and portable form by Messrs. Thacker Spink & Co. and will be of great use to all officers and especially to those studying for promotion examinations or for the Staff College.

OXFORD OF TO-DAY.

*A Manual for Prospective Rhodes Scholars by Laurence Crosby
and Frank Adelotte.*

(Oxford University Press. Price 8s. 6d.)

The compilers of this excellent book are both members of American Universities, who as Rhodes Scholars have graduated at Oxford.

The book comprises a brief history of the University and its Colleges, describes the courses of study for the various degrees and gives much useful information concerning social life at the University, expenses, University and College discipline, etc., etc. There is also a chapter devoted to the life of Cecil Rhodes.

The Rhodes Trust of approximately £ 2,000,000 provided 60 scholarships for the Dominions and Colonies of the British Empire, 32 for the United States and 15 for Germany, the last named being abolished during the late war and the money so released transferred to Colonial scholarships. The aim of the founder, as stated in his will, was to instill into the minds of colonial students the need for the maintenance of unity within the Empire and to further the union of the English-speaking peoples throughout the world. The Rhodes scholarships undoubtedly help to accomplish this aim and contribute to that cosmopolitanism, which is such a marked feature of Undergraduate society at Oxford and provides one of its greatest charms.

The book as a whole should prove very useful to prospective Rhodes scholars, while the portion dealing with the life of Cecil Rhodes and with the foundation and workings of his great Trust should provide matter of interest to a wide circle of readers.

IRRIGATION IN INDIA.

By D. G. Harris.

(Oxford University Press. Price Rs. 2.)

This third volume in the handy "India of To-day" series is well-written and shows that the author, besides being an irrigation engineer of distinction, can present to the lay reader the romance of his department in a really attractive form. These authoritative explanations of different aspects of public effort in India are of

value not merely to general public but also to the members of other services. Too often the right hand of Government refuses to know what the left hand is doing and just as the civilian might profit by studying Mr. Arthur Vincent's "Defence of India" in the same series, so the soldier can be advised to read Mr. D. G. Harris on Irrigation. And the soldier can be proud of the fact that the first British irrigation schemes in India were started by officers of the army. It was the diversion of the waters of the Jumna into the Delhi canal by Lieutenant Blane, R.E., following the example of Shah Jehan's great engineer Ali Mardan Khan two hundred years before, which was the first step to rectify natural irrigation deficiencies and, although it was mistrusted both by the Government and the people, it must be honoured as the work of the pioneer. Later came other soldiers, Major Arthur Cotton who planned the Upper Anicut canal project Colonel Cantley of the Royal Artillery whose name will be associated with the Ganges Canal, still one of the largest works in the World and the model in many respects for later works and Lieutenant Dyas of the Bengal Engineers who planned the Upper Bari Doab Canal.

From the military standpoint Mr. Harris' description of the Lower Swat Canal is of special interest. He shows how that canal was taken in hand to solve political difficulties on the Frontier. It was built under military guard and completed nearly forty years ago. The cost was greater than was first expected. In compensation however the revenue was underestimated and, to-day, the Lower Swat not only has achieved the political objects aimed at, but is yielding a handsome return on the capital outlay. In 1875 the tract which it now irrigates was "a barren wilderness uninhabited and almost uninhabitable: by 1895 it was a wide expanse of cultivation dotted with villages occupied by a law abiding and contended peasantry." This provides a useful postscript to the "Defence of India." Altogether this little book is thoroughly worth reading and its outline of the projects in hand and lying ahead in the near future enables one to dream dreams and see visions of greater prosperity for this vast agricultural country.

A SCIENCE OF INFANTRY TACTICS SIMPLIFIED.

BY CAPT. B. H. LIDDELL HART.

In the preface the author of this little book tells us that it is "a humble attempt to build a science of infantry tactics upon the foundational principles which have governed all wars." Though styled humble, the task the author has set himself is in reality an extremely ambitious one, *viz.*, to present us with a new science which shall make infantry tactics more simple. The basic principles of this 'new' science may be stated in two words, Infiltration and Depth. Capt. Hart appears to be under the impression that he is the pioneer of these principles, whereas the most superficial study of the campaigns of 1866 and 1870 will prove the absurdity of any such claim. Though we as a nation were slow to follow the Germans in this respect, our pre-war manuals contained the germ of the system, and the latest editions expound it fully and clearly. Capt. Hart's claim to expound a new science and system falls, therefore, to the ground.

However, putting aside this unwarranted claim, the book has considerable value as an explanation and illustration of the principles which are set forth authoritatively in our text books. The principle of infiltration is most graphically illustrated by the metaphor of the 'expanding torrent' bursting through a dam, forcing its way through weak spots existing or created, and then expanding and widening the gap. The metaphor is, of course, familiar to all who have followed the author's controversy with Lieut.-Colonel Bond in the R. E. Journal, culminating in Colonel Fuller's delightful summing up. It is possible for the meticulously minded to object to it on the score that the dam is passive, and that, therefore, the analogy is not a true one; few metaphors will stand such close scrutiny as this, and the illustration, good in itself, is improved by a series of diagrammatic sketches showing how the theory applies in practice. As an exposition of the

genesis of the principles, and of the practical application thereof, the book is a distinct asset and cannot fail to give the student of infantry tactics a clearer view of his subject.

Another method of treatment of his subject adopted by the author is that of analysis and tabulation. This, too, has undoubtedly a certain value, but the student should be careful to guard against the tendency to regard tactics, as an *exact* science. It is no doubt true that 'surprise' may be attained by the methods of 'speed' and 'secrecy,' but the sub-division of 'speed' into 'mind' and 'movement' is perhaps a trifle far fetched. Again, the author's methods lead him at times to epigrammatic statements which are unconvincing, if not misleading; for instance, the statement that 'The defence is simply the attack halted' is to say the least of it puzzling, and seems to indicate a lack of appreciation of the human element which looms so large in war. Again, the author's divergence from the nomenclature of the various bodies as adopted in the text books is to be deprecated.

But with all its shortcomings the book will well repay study; all the more so probably because the student will find in it a good deal with which he may not agree.

10th August, 1923.

PROSPECTUS OF THE NATIONAL HORSE BREEDING AND SHOW SOCIETY OF INDIA.

(Allahabad, Pioneer Press.)

This Society deserves the widest support from all horse lovers. Its objects are: to form a national body of public opinion in horse breeding matters; to encourage and promote horse breeding in India; to protect the interest of horse breeders; to improve and standardize the various types of horses; to prepare an Indian Stud Book, and to procure uniformity in matters connected with horse shows.

The Stud Book will be divided into four sections, thoroughbreds, Arabs, indigenous and standard bred.

***NOTES ON THE HISTORY OF THE LEICESTERSHIRE
REGIMENT, JHANSI.***

(The Albion Press.)

This brief history is founded in the larger work by Colonel Webb. Its object is to assist candidates for 2nd and 3rd class certificates of education, and to show that the history of the Regiment is the history of the Empire in microcosm.

MAPS PUBLISHED BY THE SURVEY OF INDIA

Are obtainable from the MAP RECORD AND ISSUE OFFICE, 13, WOOD STREET, CALCUTTA, on the PUBLIC SERVICE on cash payment or book transfer, and for PRIVATE USE on cash payment or V.-P. P.

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(c) INTERNATIONAL MAP OF INDIA, scale 1 : 1,000,000 or nearly 16 miles to 1 inch in LAYERED edition (without shading of hills), size 30 inches \times 26 inches, price ONE RUPEE per copy.

(d) GENERAL MAPS OF INDIA; scale 32 miles to 1 inch in sets of 12 sheets, each sheet 25 inches \times 32 inches, in LAYERED and POLITICAL (without hills) editions, price Rs. 12 per set. Maps of India on various smaller scales and miscellaneous special maps illustrating Railways, &c., are also available.

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